

**Work Order ID 156636****\*156636\***

Page 1

Friday, February 03, 2017 12:56:10 PM

Item ID: D350-604-041

Accept

**\*N900040100\***

Setup Start

**\*NS1\***

Revision ID:

Item Name: Rear Locker Extender

Stop

**\*NS2\***

Start Date: 7/14/2017 Start Qty: 1.00

**\*1\***

Cust Item ID:

Required Date: 8/17/2017 Req'd Qty: 1.00

**\*1\***

Customer:

Reference:

Approvals:

Process Plan:

Date: FEB 03 2017

Tooling:

Date:

Run Start

**\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop

**\*NR2\***Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

Draw Nbr

Revision Nbr

D2273

M

D350-604-041

C U/R

AUG 24 2017

100

Document Control

0.00

**\*100\***

DOCUMENT CONTROL

DC

Memo

0.00

Doc.Control -USB or Paperwork

Photocopy bluefile and create labels per PPP D350-604-041  
CHG0010DAS  
28  
9-89

SEP 11 2017

110

PURCHASING

0.00

**\*110\***

Purchasing

Memo

0.00

Purchasing

Issue P/O: 35199  
Description: D350-604-041 Rear locker extender.  
Manufacture as per dwg D2273  
Supplier: FDC Composites Inc.  
Certification of Conformity and process sheet required.\*\*\*EXTREME CARE MUST BE TAKEN TO PROTECT THE SURFACES OF  
THE REAR LOCKER. THE SURFACES MUST BE SMOOTH AND FREE  
FROM SURFACE DEFECTS SUCH AS SCRATCHES, NICKS, OR  
DENTS.\*\*\*

\*\*\*MUST BE WELL PACKAGE, IF NOT IT WILL BE REFUSE\*\*\*

FEB 03 2017

DAS  
13  
9-89

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only ☐

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |                                              |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|----------------------------------------------|--|
| Work Order: _____<br><br>Part No. _____<br><br>NCR No. _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/><br>Suspected Unapproved <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <b>AGAINST DEPARTMENT/PROCESS</b><br><br><div style="display: flex; justify-content: space-between;"> <div>           Skid-tube <input type="checkbox"/><br/>           Machining <input type="checkbox"/><br/>           Thermoforming <input type="checkbox"/><br/>           Large Fab <input type="checkbox"/> </div> <div>           Cross tube <input type="checkbox"/><br/>           Small Fab <input type="checkbox"/><br/>           Finishing <input type="checkbox"/><br/>           Composite <input type="checkbox"/> </div> <div>           Water Jet <input type="checkbox"/><br/>           Prod. Eng. Coord. <input type="checkbox"/><br/>           Rec/Store/Packaging <input type="checkbox"/><br/>           Supplier <input type="checkbox"/> </div> <div>           Engineering <input type="checkbox"/><br/>           Quality <input type="checkbox"/><br/>           Other <input type="checkbox"/> </div> </div>                                                                                                                                                                                                                                                          |  |                                              |  |
| Date : _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Step #: _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | QTY Effective : _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  | MRB (QSI042) Approval                        |  |
| Description Work Order Deviation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Disposition                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  | Completed By                                 |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  | Lead hand / Supervisor Approval Verification |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  | QC / QA Coordinator Approval                 |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |                                              |  |
| Root Cause                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | FAULT CATEGORY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |                                              |  |
| <div style="display: flex;"> <div style="flex: 1;">           Environment <input type="checkbox"/><br/>           Design <input type="checkbox"/><br/>           Doc/Data <input type="checkbox"/><br/>           Equip/Tooling <input type="checkbox"/><br/>           Handling/Pre <input type="checkbox"/><br/>           Material <input type="checkbox"/><br/>           Internal Transport <input type="checkbox"/><br/>           Tribal Knowledge <input type="checkbox"/><br/>           LOA <input type="checkbox"/><br/>           Substation <input type="checkbox"/><br/>           Past Expiry Date <input type="checkbox"/><br/>           Misidentified <input type="checkbox"/> </div> <div style="flex: 1;">           No Re-verification <input type="checkbox"/><br/>           Operator <input type="checkbox"/><br/>           Offset/Setup <input type="checkbox"/><br/>           Supplier <input type="checkbox"/><br/>           Training <input type="checkbox"/><br/>           Use for Testing <input type="checkbox"/><br/>           Poor Information <input type="checkbox"/><br/>           Rushing <input type="checkbox"/><br/>           Product Improvement <input type="checkbox"/><br/>           Process Improvement <input type="checkbox"/><br/>           Manufacturing Process <input type="checkbox"/><br/>           Past Due <input type="checkbox"/> </div> </div> | <div style="display: flex;"> <div style="flex: 1;">           Pressure/Forced <input type="checkbox"/><br/>           Bending <input type="checkbox"/><br/>           Centre Not Concentric <input type="checkbox"/><br/>           Cracks <input type="checkbox"/><br/>           Crimp/Kink/Ripple/Wave <input type="checkbox"/><br/>           Cuffs <input type="checkbox"/><br/>           Crushing <input type="checkbox"/><br/>           Heat Treat <input type="checkbox"/><br/>           Wave/Twist in Tube <input type="checkbox"/><br/>           Marks/Chatter <input type="checkbox"/> </div> <div style="flex: 1;">           Temperature/Cure <input type="checkbox"/><br/>           Set-up <input type="checkbox"/><br/>           BOM/Route <input type="checkbox"/><br/>           Broken/Damage/Defect <input type="checkbox"/><br/>           Inspection Incomplete/Unqualified <input type="checkbox"/><br/>           Contamination <input type="checkbox"/><br/>           Countersink <input type="checkbox"/><br/>           Cut Too Short <input type="checkbox"/><br/>           Instructions Incomplete/Unclear <input type="checkbox"/><br/>           Drill Holes <input type="checkbox"/> </div> </div> | <div style="display: flex;"> <div style="flex: 1;">           Power Loss/Surge <input type="checkbox"/><br/>           Folio/Program <input type="checkbox"/><br/>           Grain <input type="checkbox"/><br/>           Weld <input type="checkbox"/><br/>           Wrong Stock Pulled <input type="checkbox"/><br/>           Out of Sequence <input type="checkbox"/><br/>           Off-set <input type="checkbox"/><br/>           Mislabeled <input type="checkbox"/><br/>           Fit/Function <input type="checkbox"/><br/>           Misaligned/off center <input type="checkbox"/> </div> <div style="flex: 1;">           Positioned Wrong <input type="checkbox"/><br/>           Outside Dimensions <input type="checkbox"/><br/>           Over/Under tolerance <input type="checkbox"/><br/>           Part Incorrect <input type="checkbox"/><br/>           Part Lost/Missing <input type="checkbox"/><br/>           Part Moved <input type="checkbox"/><br/>           Drawing <input type="checkbox"/><br/>           Finish <input type="checkbox"/><br/>           Misread <input type="checkbox"/><br/>           Turning Sequence <input type="checkbox"/> </div> </div> |  |                                              |  |
| OTHER : _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |                                              |  |

**Work Order ID 156636**

Friday, February 03, 2017 12:56:10 PM

**\*156636\***

Page 2

Item ID: D350-604-041

Accept

**\*N900040100\***Setup Start **\*NS1\***

Revision ID:

Stop **\*NS2\***

Item Name: Rear Locker Extender

Start Date: 7/14/2017 Start Qty: 1.00

**\*1\***

Cust Item ID:

Required Date: 8/17/2017 Req'd Qty: 1.00

**\*1\***

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start **\*NR1\***

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop **\*NR2\***

| Sequence ID/<br>Work Center ID | Operation<br>Description                                                                          | Set Up/<br>Run Hours | Tool ID | Tool # | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp |
|--------------------------------|---------------------------------------------------------------------------------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
| 120                            | Receive & Inspect for Damage & Mat'l Certs                                                        | 0.00                 |         |        |              |               |               |                  |                |
| <b>*120*</b>                   | Packaging                                                                                         |                      |         |        |              |               |               |                  |                |
| Packaging                      | Memo                                                                                              | 0.00                 |         |        |              |               |               |                  |                |
| Packaging                      | Ensure a copy of Certification of Conformity and process sheet from Carbon-by-Design is attached. |                      |         |        |              |               |               |                  |                |
|                                | ***DO NOT STACK REAR LOCKERS OR ANYTHING ON THEM***                                               |                      |         |        |              |               |               |                  |                |
| 130                            | QC6- Inspect dimensions to drawing                                                                | 0.00                 |         |        |              |               |               |                  |                |
| <b>*130*</b>                   |                                                                                                   |                      |         |        |              |               |               |                  |                |
| QC                             | Memo                                                                                              | 0.00                 |         |        |              |               |               |                  |                |
| Quality Control                | Check hole locations to template. DT 8824 Check process sheet and audit.                          |                      |         |        |              |               |               |                  |                |
| 140                            |                                                                                                   | 0.00                 |         |        |              |               |               |                  |                |
| <b>*140*</b>                   |                                                                                                   |                      |         |        |              |               |               |                  |                |
| Small Fab                      | Memo                                                                                              | 0.05                 |         |        |              |               |               |                  |                |
| Small Fab                      | 1- INSTALL DECALS AS PER DWG                                                                      |                      |         |        |              |               |               |                  |                |

1x 50 17-8-21.

1 <sup>DAS</sup><sub>38</sub> AUG 24 2017<sup>DAS</sup><sub>28</sub>  
9-89 AUG 28 2017



DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only ☐

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                 |                       |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|-----------------------|--|
| Work Order: _____<br><br>Part No. _____<br><br>NCR No. _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/><br>Suspected Unapproved <input type="checkbox"/> | <b>AGAINST DEPARTMENT/PROCESS</b><br><br><div style="display: flex; justify-content: space-between;"> <div>           Skid-tube <input type="checkbox"/><br/>           Machining <input type="checkbox"/><br/>           Thermoforming <input type="checkbox"/><br/>           Large Fab <input type="checkbox"/> </div> <div>           Cross tube <input type="checkbox"/><br/>           Small Fab <input type="checkbox"/><br/>           Finishing <input type="checkbox"/><br/>           Composite <input type="checkbox"/> </div> <div>           Water Jet <input type="checkbox"/><br/>           Prod. Eng. Coord. <input type="checkbox"/><br/>           Rec/Store/Packaging <input type="checkbox"/><br/>           Supplier <input type="checkbox"/> </div> <div>           Engineering <input type="checkbox"/><br/>           Quality <input type="checkbox"/><br/>           Other <input type="checkbox"/> </div> </div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                 |                       |  |
| Date :                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Step #:                                                                                                                                                                            | QTY Effective :                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                 | MRB (QSI042) Approval |  |
| Description Work Order Deviation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Disposition                                     |                       |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Completed By                                    |                       |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Lead hand / Supervisor<br>Approval Verification |                       |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | QC / QA Coordinator<br>Approval                 |                       |  |
| <b>Root Cause</b><br><div style="display: flex; justify-content: space-between;"> <div>           Environment <input type="checkbox"/><br/>           Design <input type="checkbox"/><br/>           Doc/Data <input type="checkbox"/><br/>           Equip/Tooling <input type="checkbox"/><br/>           Handling/Pre <input type="checkbox"/><br/>           Material <input type="checkbox"/><br/>           Internal Transport <input type="checkbox"/><br/>           Tribal Knowledge <input type="checkbox"/><br/>           LOA <input type="checkbox"/><br/>           Substation <input type="checkbox"/><br/>           Past Expiry Date <input type="checkbox"/><br/>           Misidentified <input type="checkbox"/> </div> <div>           No Re-verification <input type="checkbox"/><br/>           Operator <input type="checkbox"/><br/>           Offset/Setup <input type="checkbox"/><br/>           Supplier <input type="checkbox"/><br/>           Training <input type="checkbox"/><br/>           Use for Testing <input type="checkbox"/><br/>           Poor Information <input type="checkbox"/><br/>           Rushing <input type="checkbox"/><br/>           Product Improvement <input type="checkbox"/><br/>           Process Improvement <input type="checkbox"/><br/>           Manufacturing Process <input type="checkbox"/><br/>           Past Due <input type="checkbox"/> </div> </div> |                                                                                                                                                                                    | <b>FAULT CATEGORY</b><br><div style="display: flex; justify-content: space-between;"> <div>           Pressure/Forced <input type="checkbox"/><br/>           Bending <input type="checkbox"/><br/>           Centre Not Concentric <input type="checkbox"/><br/>           Cracks <input type="checkbox"/><br/>           Crimp/Kink/Ripple/Wave <input type="checkbox"/><br/>           Cuffs <input type="checkbox"/><br/>           Crushing <input type="checkbox"/><br/>           Heat Treat <input type="checkbox"/><br/>           Wave/Twist in Tube <input type="checkbox"/><br/>           Marks/Chatter <input type="checkbox"/> </div> <div>           Temperature/Cure <input type="checkbox"/><br/>           Set-up <input type="checkbox"/><br/>           BOM/Route <input type="checkbox"/><br/>           Broken/Damage/Defect <input type="checkbox"/><br/>           Inspection Incomplete/Unqualified <input type="checkbox"/><br/>           Contamination <input type="checkbox"/><br/>           Countersink <input type="checkbox"/><br/>           Cut Too Short <input type="checkbox"/><br/>           Instructions Incomplete/Unclear <input type="checkbox"/><br/>           Drill Holes <input type="checkbox"/> </div> <div>           Power Loss/Surge <input type="checkbox"/><br/>           Folio/Program <input type="checkbox"/><br/>           Grain <input type="checkbox"/><br/>           Weld <input type="checkbox"/><br/>           Wrong Stock Pulled <input type="checkbox"/><br/>           Out of Sequence <input type="checkbox"/><br/>           Off-set <input type="checkbox"/><br/>           Mislabelled <input type="checkbox"/><br/>           Fit/Function <input type="checkbox"/><br/>           Misaligned/off center <input type="checkbox"/> </div> <div>           Positioned Wrong <input type="checkbox"/><br/>           Outside Dimensions <input type="checkbox"/><br/>           Over/Under tolerance <input type="checkbox"/><br/>           Part Incorrect <input type="checkbox"/><br/>           Part Lost/Missing <input type="checkbox"/><br/>           Part Moved <input type="checkbox"/><br/>           Drawing <input type="checkbox"/><br/>           Finish <input type="checkbox"/><br/>           Misread <input type="checkbox"/><br/>           Turning Sequence <input type="checkbox"/> </div> </div> |                                                 |                       |  |
| OTHER : _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                 |                       |  |



Friday, February 03, 2017 12:56:10 PM

Page 3

**Accept**

**Setup Start \*NS1\***

Stop \*NS2\*

**Cust Item ID:**

**Customer:**

**Reference:**

Run Start \*NR1\*

Stop \*NR2\*

|                 |                                               |      |  |
|-----------------|-----------------------------------------------|------|--|
| 150             | QC5- Inspect part completeness to step on W/O | 0.00 |  |
| <b>*150*</b>    |                                               |      |  |
| QC              | Memo                                          | 0.00 |  |
| Quality Control |                                               |      |  |

|              |                                                     |      |                   |
|--------------|-----------------------------------------------------|------|-------------------|
| 155          | Pick Kit                                            | 0.00 |                   |
| <b>*155*</b> |                                                     |      | AUG 24 2017       |
| Packaging    | Memo                                                | 0.00 | DAS<br>27<br>9-89 |
| Packaging    | ***DO NOT STACK REAR LOCKERS OR ANYTHING ON THEM*** |      | AUG 28 2017       |

|                 |                                         |      |                                                                                       |                    |
|-----------------|-----------------------------------------|------|---------------------------------------------------------------------------------------|--------------------|
| 158             | QC4- 100% Inspect kits for completeness | 0.00 |  | <u>AUG 28 2017</u> |
| <b>*158*</b>    |                                         |      |                                                                                       |                    |
| QC              | <b>Memo</b>                             | 0.01 |                                                                                       |                    |
| Quality Control |                                         |      |                                                                                       |                    |

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only ☐

|                                                              |  |                                                                                                                                                                                    |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |                                                                                                                   |                                                 |  |
|--------------------------------------------------------------|--|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|-------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|--|
| Work Order: _____<br><br>Part No. _____<br><br>NCR No. _____ |  | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/><br>Suspected Unapproved <input type="checkbox"/> |  | <b>AGAINST DEPARTMENT/PROCESS</b><br><br><div style="display: flex; justify-content: space-between;"> <div>             Skid-tube <input type="checkbox"/><br/>             Machining <input type="checkbox"/><br/>             Thermoforming <input type="checkbox"/><br/>             Large Fab <input type="checkbox"/> </div> <div>             Cross tube <input type="checkbox"/><br/>             Small Fab <input type="checkbox"/><br/>             Finishing <input type="checkbox"/><br/>             Composite <input type="checkbox"/> </div> <div>             Water Jet <input type="checkbox"/><br/>             Prod. Eng. Coord. <input type="checkbox"/><br/>             Rec/Store/Packaging <input type="checkbox"/><br/>             Supplier <input type="checkbox"/> </div> <div>             Engineering <input type="checkbox"/><br/>             Quality <input type="checkbox"/><br/>             Other <input type="checkbox"/> </div> </div> |  |  |                                                                                                                   |                                                 |  |
| Date :                                                       |  | Step #:                                                                                                                                                                            |  | QTY Effective :                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  | <b>MRB (QSI042) Approval</b><br><br><div style="border: 1px solid black; height: 150px; margin-top: 10px;"></div> |                                                 |  |
| Description Work Order Deviation                             |  |                                                                                                                                                                                    |  | Disposition                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |  |                                                                                                                   |                                                 |  |
|                                                              |  |                                                                                                                                                                                    |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |                                                                                                                   |                                                 |  |
|                                                              |  |                                                                                                                                                                                    |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |                                                                                                                   |                                                 |  |
|                                                              |  |                                                                                                                                                                                    |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |                                                                                                                   | Completed By                                    |  |
|                                                              |  |                                                                                                                                                                                    |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |                                                                                                                   | Lead hand / Supervisor<br>Approval Verification |  |
|                                                              |  |                                                                                                                                                                                    |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |                                                                                                                   | QC / QA Coordinator<br>Approval                 |  |

| Root Cause                                  |                                                |                                                 |                                                            | FAULT CATEGORY                                 |                                               |  |  |
|---------------------------------------------|------------------------------------------------|-------------------------------------------------|------------------------------------------------------------|------------------------------------------------|-----------------------------------------------|--|--|
| Environment <input type="checkbox"/>        | No Re-verification <input type="checkbox"/>    | Pressure/Forced <input type="checkbox"/>        | Temperature/Cure <input type="checkbox"/>                  | Power Loss/Surge <input type="checkbox"/>      | Positioned Wrong <input type="checkbox"/>     |  |  |
| Design <input type="checkbox"/>             | Operator <input type="checkbox"/>              | Bending <input type="checkbox"/>                | Set-up <input type="checkbox"/>                            | Folio/Program <input type="checkbox"/>         | Outside Dimensions <input type="checkbox"/>   |  |  |
| Doc/Data <input type="checkbox"/>           | Offset/Setup <input type="checkbox"/>          | Centre Not Concentric <input type="checkbox"/>  | BOM/Route <input type="checkbox"/>                         | Grain <input type="checkbox"/>                 | Over/Under tolerance <input type="checkbox"/> |  |  |
| Equip/Tooling <input type="checkbox"/>      | Supplier <input type="checkbox"/>              | Cracks <input type="checkbox"/>                 | Broken/Damage/Defect <input type="checkbox"/>              | Weld <input type="checkbox"/>                  | Part Incorrect <input type="checkbox"/>       |  |  |
| Handling/Pre <input type="checkbox"/>       | Training <input type="checkbox"/>              | Crimp/Kink/Ripple/Wave <input type="checkbox"/> | Inspection Incomplete/Unqualified <input type="checkbox"/> | Wrong Stock Pulled <input type="checkbox"/>    | Part Lost/Missing <input type="checkbox"/>    |  |  |
| Material <input type="checkbox"/>           | Use for Testing <input type="checkbox"/>       | Cuffs <input type="checkbox"/>                  | Contamination <input type="checkbox"/>                     | Out of Sequence <input type="checkbox"/>       | Part Moved <input type="checkbox"/>           |  |  |
| Internal Transport <input type="checkbox"/> | Poor Information <input type="checkbox"/>      | Crushing <input type="checkbox"/>               | Countersink <input type="checkbox"/>                       | Off-set <input type="checkbox"/>               | Drawing <input type="checkbox"/>              |  |  |
| Tribal Knowledge <input type="checkbox"/>   | Rushing <input type="checkbox"/>               | Heat Treat <input type="checkbox"/>             | Cut Too Short <input type="checkbox"/>                     | Mislabeled <input type="checkbox"/>            | Finish <input type="checkbox"/>               |  |  |
| LOA <input type="checkbox"/>                | Product Improvement <input type="checkbox"/>   | Wave/Twist in Tube <input type="checkbox"/>     | Instructions Incomplete/Unclear <input type="checkbox"/>   | Fit/Function <input type="checkbox"/>          | Misread <input type="checkbox"/>              |  |  |
| Substation <input type="checkbox"/>         | Process Improvement <input type="checkbox"/>   | Marks/Chatter <input type="checkbox"/>          | Drill Holes <input type="checkbox"/>                       | Misaligned/off center <input type="checkbox"/> | Turning Sequence <input type="checkbox"/>     |  |  |
| Past Expiry Date <input type="checkbox"/>   | Manufacturing Process <input type="checkbox"/> | OTHER : _____                                   |                                                            |                                                |                                               |  |  |
| Misidentified <input type="checkbox"/>      | Past Due <input type="checkbox"/>              |                                                 |                                                            |                                                |                                               |  |  |

**Work Order ID 156636**

Friday, February 03, 2017 12:56:10 PM

**\*1566.36\***

Page 4

Item ID: D350-604-041

Accept

**\*N900040100\***Setup Start **\*NS1\***

Revision ID:

Stop **\*NS2\***

Item Name: Rear Locker Extender

Start Date: 7/14/2017 Start Qty: 1.00 **\*1\***

Cust Item ID:

Required Date: 8/17/2017 Req'd Qty: 1.00 **\*1\***

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start **\*NR1\***

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop **\*NR2\***

| Sequence ID/<br>Work Center ID | Operation<br>Description                               | Set Up/<br>Run Hours | Tool ID | Tool # | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp |
|--------------------------------|--------------------------------------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
| 160                            | Packaging                                              | 0.00                 |         |        |              |               |               |                  |                |
| <b>*160*</b>                   |                                                        |                      |         |        |              |               |               |                  |                |
| Packaging                      | Memo                                                   | 0.00                 |         |        |              |               |               |                  |                |
| Packaging                      | Identify and pack for shipping as per PPP D350-604-041 |                      |         |        |              |               |               |                  |                |
|                                | Location: <u>Fg105</u>                                 |                      |         |        |              |               |               |                  |                |
|                                | PPP Rev: _____                                         |                      |         |        |              |               |               |                  |                |
| 170                            | QC21- Final Inspection - Work Order Release            | 0.00                 |         |        |              |               |               |                  |                |
| <b>*170*</b>                   |                                                        |                      |         |        |              |               |               |                  |                |
| QC                             | Memo                                                   | 0.02                 |         |        |              |               |               |                  |                |
| Quality Control                |                                                        |                      |         |        |              |               |               |                  |                |

DAS  
28  
9-89

SEP 11 2017

17/9/13 DAS  
21  
9-89

SEP 11 2017



DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only ☐

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |                                              |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|----------------------------------------------|--|
| Work Order: _____<br><br>Part No. _____<br><br>NCR No. _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/><br>Suspected Unapproved <input type="checkbox"/> | <b>AGAINST DEPARTMENT/PROCESS</b><br><br><div style="display: flex; justify-content: space-between;"> <div>           Skid-tube <input type="checkbox"/><br/>           Machining <input type="checkbox"/><br/>           Thermoforming <input type="checkbox"/><br/>           Large Fab <input type="checkbox"/> </div> <div>           Cross tube <input type="checkbox"/><br/>           Small Fab <input type="checkbox"/><br/>           Finishing <input type="checkbox"/><br/>           Composite <input type="checkbox"/> </div> <div>           Water Jet <input type="checkbox"/><br/>           Prod. Eng. Coord. <input type="checkbox"/><br/>           Rec/Store/Packaging <input type="checkbox"/><br/>           Supplier <input type="checkbox"/> </div> <div>           Engineering <input type="checkbox"/><br/>           Quality <input type="checkbox"/><br/>           Other <input type="checkbox"/> </div> </div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |                                              |  |
| Date : _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Step #: _____                                                                                                                                                                      | QTY Effective : _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  | MRB (QSI042) Approval                        |  |
| Description Work Order Deviation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                    | Disposition                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  | Completed By                                 |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  | Lead hand / Supervisor Approval Verification |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  | QC / QA Coordinator Approval                 |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |                                              |  |
| <b>Root Cause</b><br><div style="display: flex; justify-content: space-between;"> <div style="width: 45%;">           Environment <input type="checkbox"/><br/>           Design <input type="checkbox"/><br/>           Doc/Data <input type="checkbox"/><br/>           Equip/Tooling <input type="checkbox"/><br/>           Handling/Pre <input type="checkbox"/><br/>           Material <input type="checkbox"/><br/>           Internal Transport <input type="checkbox"/><br/>           Tribal Knowledge <input type="checkbox"/><br/>           LOA <input type="checkbox"/><br/>           Substation <input type="checkbox"/><br/>           Past Expiry Date <input type="checkbox"/><br/>           Misidentified <input type="checkbox"/> </div> <div style="width: 45%;">           No Re-verification <input type="checkbox"/><br/>           Operator <input type="checkbox"/><br/>           Offset/Setup <input type="checkbox"/><br/>           Supplier <input type="checkbox"/><br/>           Training <input type="checkbox"/><br/>           Use for Testing <input type="checkbox"/><br/>           Poor Information <input type="checkbox"/><br/>           Rushing <input type="checkbox"/><br/>           Product Improvement <input type="checkbox"/><br/>           Process Improvement <input type="checkbox"/><br/>           Manufacturing Process <input type="checkbox"/><br/>           Past Due <input type="checkbox"/> </div> </div> |                                                                                                                                                                                    | <b>FAULT CATEGORY</b><br><div style="display: flex; justify-content: space-between;"> <div style="width: 33%;">           Pressure/Forced <input type="checkbox"/><br/>           Bending <input type="checkbox"/><br/>           Centre Not Concentric <input type="checkbox"/><br/>           Cracks <input type="checkbox"/><br/>           Crimp/Kink/Ripple/Wave <input type="checkbox"/><br/>           Cuffs <input type="checkbox"/><br/>           Crushing <input type="checkbox"/><br/>           Heat Treat <input type="checkbox"/><br/>           Wave/Twist in Tube <input type="checkbox"/><br/>           Marks/Chatter <input type="checkbox"/> </div> <div style="width: 33%;">           Temperature/Cure <input type="checkbox"/><br/>           Set-up <input type="checkbox"/><br/>           BOM/Route <input type="checkbox"/><br/>           Broken/Damage/Defect <input type="checkbox"/><br/>           Inspection Incomplete/Unqualified <input type="checkbox"/><br/>           Contamination <input type="checkbox"/><br/>           Countersink <input type="checkbox"/><br/>           Cut Too Short <input type="checkbox"/><br/>           Instructions Incomplete/Unclear <input type="checkbox"/><br/>           Drill Holes <input type="checkbox"/> </div> <div style="width: 33%;">           Power Loss/Surge <input type="checkbox"/><br/>           Folio/Program <input type="checkbox"/><br/>           Grain <input type="checkbox"/><br/>           Weld <input type="checkbox"/><br/>           Wrong Stock Pulled <input type="checkbox"/><br/>           Out of Sequence <input type="checkbox"/><br/>           Off-set <input type="checkbox"/><br/>           Mislabelled <input type="checkbox"/><br/>           Fit/Function <input type="checkbox"/><br/>           Misaligned/off center <input type="checkbox"/> </div> <div style="width: 33%;">           Positioned Wrong <input type="checkbox"/><br/>           Outside Dimensions <input type="checkbox"/><br/>           Over/Under tolerance <input type="checkbox"/><br/>           Part Incorrect <input type="checkbox"/><br/>           Part Lost/Missing <input type="checkbox"/><br/>           Part Moved <input type="checkbox"/><br/>           Drawing <input type="checkbox"/><br/>           Finish <input type="checkbox"/><br/>           Misread <input type="checkbox"/><br/>           Turning Sequence <input type="checkbox"/> </div> </div> |  |                                              |  |
| OTHER : _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |                                              |  |

# Picklist Print

Friday, February 03, 2017 12:56:10 PM

Page 1

Work Order ID: 156636

\*156636\*

Parent Item: D350-604-041

\*D350-604-041\*

Parent Item Name: Rear Locker Extender

Start Date: 7/14/2017

Required Date: 8/17/2017

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev:Q03.12.01ReformatKJ/RF IPP REV:R  
12.02.07 AS PER ECN12-521 DD verf:JLM IPP REV:S 12.04.04  
AS PER DWG REV.B DD VERF:EC IPP REV:T 13.09.12 as per  
CHG006/ECN13-616 DDVERF:JLM IPP REV:U 14.05.28 as per  
chg008/ecn14-563 DD verf:JLM IPP REV:V 15.03.13 remove cam lock and  
washerDD verf:JLM IPP REV:W 15.03.25 ECN15-545 DD  
VERF:JLM IPP REV:X 17.01.12 AS PER CHG010 DD  
VERF:JLM

| Component Item ID/<br>Item Name                          | Replacement<br>Item ID | Mfg/<br>Purch | Bin<br>Item | Primary<br>Location | Last<br>Location | Route<br>Seq ID | Unit of<br>Measure | Qty on<br>Hand  | Qty per Kit | Total<br>Qty | Qty<br>Issued | Date<br>Issued | Status            |
|----------------------------------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|-----------------|-------------|--------------|---------------|----------------|-------------------|
| D2268<br>*D2268*<br>Placard                              |                        | Manufactured  | No          |                     |                  | 140             | Each               | 13.0000         | 1           | 1            |               | AUG 24 2017    | DAS<br>27<br>9-89 |
|                                                          |                        |               |             | <u>Location</u>     |                  | <u>Loc Qty</u>  |                    | <u>Loc Code</u> |             |              |               |                |                   |
|                                                          |                        |               |             | ST006               |                  | 13              |                    |                 |             |              |               |                |                   |
|                                                          |                        |               |             |                     | 147069           | 7               |                    | 6/13/2017       |             |              |               |                |                   |
|                                                          |                        |               |             |                     | 148553           | 6               |                    | 7/22/2017       |             |              |               |                |                   |
| D2269<br>*D2269*<br>Placard                              |                        | Manufactured  | No          |                     |                  | 155             | Each               | 7.0000          | 1           | 1            |               |                | DAS<br>27<br>9-89 |
|                                                          |                        |               |             | <u>Location</u>     |                  | <u>Loc Qty</u>  |                    | <u>Loc Code</u> |             |              |               |                |                   |
|                                                          |                        |               |             | ST006               |                  | 7               |                    | B161468         | 1           |              |               |                |                   |
|                                                          |                        |               |             |                     | 147070           | 1               |                    | 6/13/2017       |             |              |               |                |                   |
|                                                          |                        |               |             |                     | 148588           | 6               |                    | 7/22/2017       |             |              |               |                |                   |
| D2728-1<br>*D2728-1*<br>Dart Logo Label                  |                        | Manufactured  | Yes         |                     |                  | 140             | Each               | 0.0000          | 1           | 1            |               |                | DAS<br>27<br>9-89 |
| D350-604-041P<br>*D350-604-041P*<br>Rear Locker Extender |                        | Purchased     | No          |                     |                  | 110             | Each               | 0.0000          | 1           | 1            |               |                |                   |

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only ☐

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |                       |                                                                                                                                      |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| Work Order: _____<br><br>Part No. _____<br><br>NCR No. _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/><br>Suspected Unapproved <input type="checkbox"/> | <b>AGAINST DEPARTMENT/PROCESS</b><br><br><div style="display: flex; justify-content: space-between;"> <div>             Skid-tube <input type="checkbox"/><br/>             Machining <input type="checkbox"/><br/>             Thermoforming <input type="checkbox"/><br/>             Large Fab <input type="checkbox"/> </div> <div>             Cross tube <input type="checkbox"/><br/>             Small Fab <input type="checkbox"/><br/>             Finishing <input type="checkbox"/><br/>             Composite <input type="checkbox"/> </div> <div>             Water Jet <input type="checkbox"/><br/>             Prod. Eng. Coord. <input type="checkbox"/><br/>             Rec/Store/Packaging <input type="checkbox"/><br/>             Supplier <input type="checkbox"/> </div> <div>             Engineering <input type="checkbox"/><br/>             Quality <input type="checkbox"/><br/>             Other <input type="checkbox"/> </div> </div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |                       |                                                                                                                                      |
| Date : _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Step #: _____                                                                                                                                                                      | QTY Effective : _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  | MRB (QSI042) Approval |                                                                                                                                      |
| Description Work Order Deviation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                    | Disposition                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |                       | Completed By                                                                                                                         |
| <div style="position: absolute; left: 10px; top: 40px; color: blue; font-size: 20px;">             140<br/>13<br/>12           </div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |                       | Lead hand / Supervisor<br>Approval Verification                                                                                      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |                       | QC / QA Coordinator<br>Approval                                                                                                      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |                       | <div style="position: absolute; left: 10px; top: 40px; color: blue; font-size: 20px;">             85<br/>84<br/>83           </div> |
| <b>Root Cause</b><br><div style="display: flex; justify-content: space-between;"> <div style="width: 45%;">             Environment <input type="checkbox"/><br/>             Design <input type="checkbox"/><br/>             Doc/Data <input type="checkbox"/><br/>             Equip/Tooling <input type="checkbox"/><br/>             Handling/Pre <input type="checkbox"/><br/>             Material <input type="checkbox"/><br/>             Internal Transport <input type="checkbox"/><br/>             Tribal Knowledge <input type="checkbox"/><br/>             LOA <input type="checkbox"/><br/>             Substation <input type="checkbox"/><br/>             Past Expiry Date <input type="checkbox"/><br/>             Misidentified <input type="checkbox"/> </div> <div style="width: 45%;">             No Re-verification <input type="checkbox"/><br/>             Operator <input type="checkbox"/><br/>             Offset/Setup <input type="checkbox"/><br/>             Supplier <input type="checkbox"/><br/>             Training <input type="checkbox"/><br/>             Use for Testing <input type="checkbox"/><br/>             Poor Information <input type="checkbox"/><br/>             Rushing <input type="checkbox"/><br/>             Product Improvement <input type="checkbox"/><br/>             Process Improvement <input type="checkbox"/><br/>             Manufacturing Process <input type="checkbox"/><br/>             Past Due <input type="checkbox"/> </div> </div> |                                                                                                                                                                                    | <b>FAULT CATEGORY</b><br><div style="display: flex; justify-content: space-between;"> <div style="width: 30%;">             Pressure/Forced <input type="checkbox"/><br/>             Bending <input type="checkbox"/><br/>             Centre Not Concentric <input type="checkbox"/><br/>             Cracks <input type="checkbox"/><br/>             Crimp/Kink/Ripple/Wave <input type="checkbox"/><br/>             Cuffs <input type="checkbox"/><br/>             Crushing <input type="checkbox"/><br/>             Heat Treat <input type="checkbox"/><br/>             Wave/Twist in Tube <input type="checkbox"/><br/>             Marks/Chatter <input type="checkbox"/> </div> <div style="width: 30%;">             Temperature/Cure <input type="checkbox"/><br/>             Set-up <input type="checkbox"/><br/>             BOM/Route <input type="checkbox"/><br/>             Broken/Damage/Defect <input type="checkbox"/><br/>             Inspection Incomplete/Unqualified <input type="checkbox"/><br/>             Contamination <input type="checkbox"/><br/>             Countersink <input type="checkbox"/><br/>             Cut Too Short <input type="checkbox"/><br/>             Instructions Incomplete/Unclear <input type="checkbox"/><br/>             Drill Holes <input type="checkbox"/> </div> <div style="width: 30%;">             Power Loss/Surge <input type="checkbox"/><br/>             Folio/Program <input type="checkbox"/><br/>             Grain <input type="checkbox"/><br/>             Weld <input type="checkbox"/><br/>             Wrong Stock Pulled <input type="checkbox"/><br/>             Out of Sequence <input type="checkbox"/><br/>             Off-set <input type="checkbox"/><br/>             Mislabelled <input type="checkbox"/><br/>             Fit/Function <input type="checkbox"/><br/>             Misaligned/off center <input type="checkbox"/> </div> <div style="width: 30%;">             Positioned Wrong <input type="checkbox"/><br/>             Outside Dimensions <input type="checkbox"/><br/>             Over/Under tolerance <input type="checkbox"/><br/>             Part Incorrect <input type="checkbox"/><br/>             Part Lost/Missing <input type="checkbox"/><br/>             Part Moved <input type="checkbox"/><br/>             Drawing <input type="checkbox"/><br/>             Finish <input type="checkbox"/><br/>             Misread <input type="checkbox"/><br/>             Turning Sequence <input type="checkbox"/> </div> </div> |  |                       |                                                                                                                                      |
| OTHER : _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |                       |                                                                                                                                      |



# Picklist Print

Friday, February 03, 2017 12:56:10 PM

Page 2

Work Order ID: 156636

**\*156636\***

Parent Item: D350-604-041

**\*D350-604-041\***

Parent Item Name: Rear Locker Extender

Start Date: 7/14/2017

Required Date: 8/17/2017

Start Qty: 1.00

Required Qty: 1.00

D5062-041

Manufactured No

155

Each

16.0000

1

1

**\*D5062-041\***

Bracket Assembly

**\*\***

DAS  
27  
9-89

DAS  
28  
9-89

Location

Loc Qty

Loc Code

ST147

16

145920

16

AUG 24 2017

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only ☐

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                 |                       |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|-----------------------|--|
| Work Order: _____<br><br>Part No. _____<br><br>NCR No. _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/><br>Suspected Unapproved <input type="checkbox"/> | <b>AGAINST DEPARTMENT/PROCESS</b><br><br><div style="display: flex; justify-content: space-between;"> <div>             Skid-tube <input type="checkbox"/><br/>             Machining <input type="checkbox"/><br/>             Thermoforming <input type="checkbox"/><br/>             Large Fab <input type="checkbox"/> </div> <div>             Cross tube <input type="checkbox"/><br/>             Small Fab <input type="checkbox"/><br/>             Finishing <input type="checkbox"/><br/>             Composite <input type="checkbox"/> </div> <div>             Water Jet <input type="checkbox"/><br/>             Prod. Eng. Coord. <input type="checkbox"/><br/>             Rec/Store/Packaging <input type="checkbox"/><br/>             Supplier <input type="checkbox"/> </div> <div>             Engineering <input type="checkbox"/><br/>             Quality <input type="checkbox"/><br/>             Other <input type="checkbox"/> </div> </div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                 |                       |  |
| Date : _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Step #: _____                                                                                                                                                                      | QTY Effective : _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                 | MRB (QSI042) Approval |  |
| Description Work Order Deviation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Disposition                                     |                       |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Completed By                                    |                       |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Lead hand / Supervisor<br>Approval Verification |                       |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | QC / QA Coordinator<br>Approval                 |                       |  |
| <b>Root Cause</b><br><div style="display: flex; justify-content: space-between;"> <div>             Environment <input type="checkbox"/><br/>             Design <input type="checkbox"/><br/>             Doc/Data <input type="checkbox"/><br/>             Equip/Tooling <input type="checkbox"/><br/>             Handling/Pre <input type="checkbox"/><br/>             Material <input type="checkbox"/><br/>             Internal Transport <input type="checkbox"/><br/>             Tribal Knowledge <input type="checkbox"/><br/>             LOA <input type="checkbox"/><br/>             Substation <input type="checkbox"/><br/>             Past Expiry Date <input type="checkbox"/><br/>             Misidentified <input type="checkbox"/> </div> <div>             No Re-verification <input type="checkbox"/><br/>             Operator <input type="checkbox"/><br/>             Offset/Setup <input type="checkbox"/><br/>             Supplier <input type="checkbox"/><br/>             Training <input type="checkbox"/><br/>             Use for Testing <input type="checkbox"/><br/>             Poor Information <input type="checkbox"/><br/>             Rushing <input type="checkbox"/><br/>             Product Improvement <input type="checkbox"/><br/>             Process Improvement <input type="checkbox"/><br/>             Manufacturing Process <input type="checkbox"/><br/>             Past Due <input type="checkbox"/> </div> </div> |                                                                                                                                                                                    | <b>FAULT CATEGORY</b><br><div style="display: flex; justify-content: space-between;"> <div>             Pressure/Forced <input type="checkbox"/><br/>             Bending <input type="checkbox"/><br/>             Centre Not Concentric <input type="checkbox"/><br/>             Cracks <input type="checkbox"/><br/>             Crimp/Kink/Ripple/Wave <input type="checkbox"/><br/>             Cuffs <input type="checkbox"/><br/>             Crushing <input type="checkbox"/><br/>             Heat Treat <input type="checkbox"/><br/>             Wave/Twist in Tube <input type="checkbox"/><br/>             Marks/Chatter <input type="checkbox"/> </div> <div>             Temperature/Cure <input type="checkbox"/><br/>             Set-up <input type="checkbox"/><br/>             BOM/Route <input type="checkbox"/><br/>             Broken/Damage/Defect <input type="checkbox"/><br/>             Inspection Incomplete/Unqualified <input type="checkbox"/><br/>             Contamination <input type="checkbox"/><br/>             Countersink <input type="checkbox"/><br/>             Cut Too Short <input type="checkbox"/><br/>             Instructions Incomplete/Unclear <input type="checkbox"/><br/>             Drill Holes <input type="checkbox"/> </div> <div>             Power Loss/Surge <input type="checkbox"/><br/>             Folio/Program <input type="checkbox"/><br/>             Grain <input type="checkbox"/><br/>             Weld <input type="checkbox"/><br/>             Wrong Stock Pulled <input type="checkbox"/><br/>             Out of Sequence <input type="checkbox"/><br/>             Off-set <input type="checkbox"/><br/>             Misabeled <input type="checkbox"/><br/>             Fit/Function <input type="checkbox"/><br/>             Misaligned/off center <input type="checkbox"/> </div> <div>             Positioned Wrong <input type="checkbox"/><br/>             Outside Dimensions <input type="checkbox"/><br/>             Over/Under tolerance <input type="checkbox"/><br/>             Part Incorrect <input type="checkbox"/><br/>             Part Lost/Missing <input type="checkbox"/><br/>             Part Moved <input type="checkbox"/><br/>             Drawing <input type="checkbox"/><br/>             Finish <input type="checkbox"/><br/>             Misread <input type="checkbox"/><br/>             Turning Sequence <input type="checkbox"/> </div> </div> |                                                 |                       |  |
| OTHER : _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                 |                       |  |

**TABLE 1**

| POSITION | MATERIALS                 |
|----------|---------------------------|
| 1        | TOOL SURFACE              |
| 2        | GELCOAT                   |
| 3        | 3/4 oz CHOPPED STRAND MAT |
| 4        | 7725 FIBER GLASS          |
| 5        | 7725 FIBER GLASS          |
| 9        | 7725 FIBER GLASS          |
| 10       | PRIMER                    |

**TABLE 2**

| POSITION | MATERIALS                 |
|----------|---------------------------|
| 1        | TOOL SURFACE              |
| 2        | GELCOAT                   |
| 3        | 3/4 oz CHOPPED STRAND MAT |
| 4        | 7725 FIBER GLASS          |
| 5        | 7725 FIBER GLASS          |
| 6        | 7725 FIBER GLASS          |
| 7        | 7725 FIBER GLASS          |
| 8        | 7725 FIBER GLASS          |
| 9        | 7725 FIBER GLASS          |
| 10       | PRIMER                    |

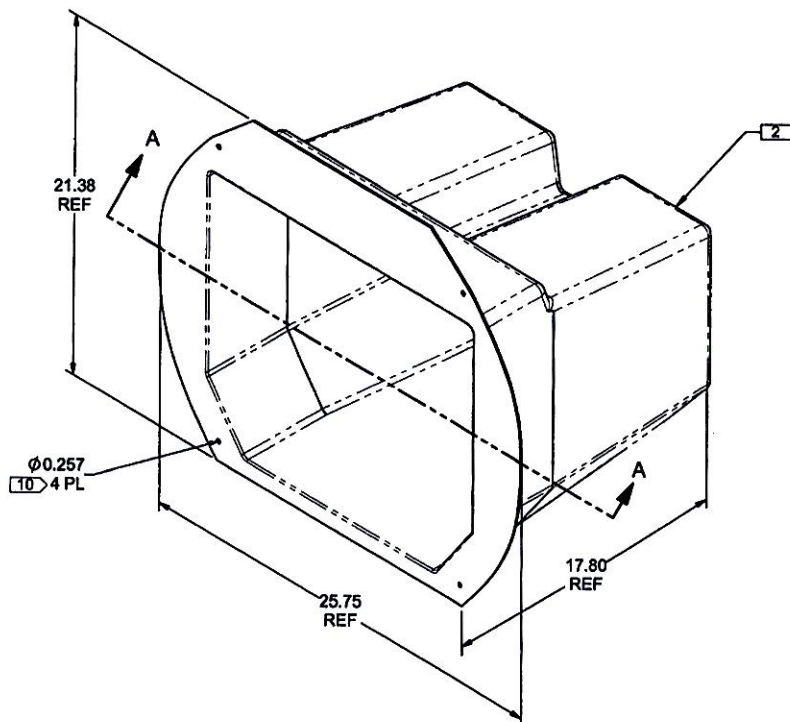
**D2273 REAR LOCKER EXTENDER**

**TABLE 3**

| MATERIAL USED     | DESCRIPTION                             |
|-------------------|-----------------------------------------|
| GELCOAT           | 55X3535 WHITE GELCOAT                   |
| FIBER GLASS MAT   | OWENS CORNING 3/4 oz CHOPPED STRAND MAT |
| FIBER GLASS CLOTH | HEXCEL 7725 FIBER GLASS                 |
| RESIN SYSTEM      | DION 7704                               |
| PRIMER            | TEMPO 4500-PB-23G (GREEN)               |

**NOTES:**

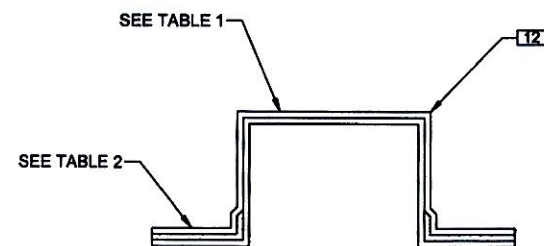
- 1) MATERIAL: SEE TABLE 3
- 2) FINISH: SEE TABLES 1, 2, & 3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
- 7) WEIGHT: 5.5- 7.5 lbs
- 8) LAMINATE PER DART QSI 006. LAMINATION SCHEDULE PER THIS DRAWING
- 9) LAYUP USING DT9871 MOLD. WET LAYUP WITH BAG/VACUUM
- 10) TRIM & DRILL PER DT9805. OPEN HOLES TO Ø0.257
- 11) CONSTRUCTION: SEE TABLES 1 & 2
- 12) MATTE TO HOLD DOWN CORNERS AS REQUIRED



FEB 03 2017

W10: 156635

DAS  
13  
9-89



**SECTION A-A**

|      |                                                                                                                |     |          |
|------|----------------------------------------------------------------------------------------------------------------|-----|----------|
| M    | CHANGE GELCOAT TO 55X3535 WHITE GELCOAT, REMOVE PAINT FINISH OPTION (NOTE 2)                                   | DB  | 16.05.19 |
| L    | ADD PAINT OPTION (NCR 15-5408)                                                                                 | CP  | 15.10.19 |
| K    | LAYUP AND MATL PER FDC COMPOSITES PROCESS                                                                      | CP  | 15.03.12 |
| J    | CHANGED GELCOAT TO 4314-001 DURA FR WHITE                                                                      | ML  | 13.12.10 |
| I    | CHANGE GELCOAT TO POLYCOR 2330PAWK745                                                                          | SFM | 13.08.13 |
| H    | CHANGE MATERIAL & MANUFACTURING PROCESS                                                                        | DC  | 13.03.15 |
| G    | ADD MANUFACTURING OPTION B, ZN B5-1                                                                            | DC  | 12.08.08 |
| F    | PRIMER LE 3404-S/LE 1175-S WAS 1144-S, ZN A8-1                                                                 | DC  | 12.02.27 |
| E    | CHANGED SURFACE FINISH FROM 944W005 GELCOAT TO 2330PAWK745 GELCOAT, ZN A7-1. UPDATED DWG TO CURRENT STANDARDS. | DC  | 12.02.02 |
| D    | REMOVE EPOCAST, ADD SURFACE FINISH                                                                             | CP  | 02.04.01 |
| C    | CLARIFY MATERIAL, LAYUP, AND TOOLING                                                                           | RF  | 02.01.30 |
| B    | RE-DRAWN                                                                                                       | MM  | 86.05.27 |
| REV. | DESCRIPTION                                                                                                    | BY  | DATE     |

|            |          |                                                   |                                                 |
|------------|----------|---------------------------------------------------|-------------------------------------------------|
| DESIGN     | JB       | DART AEROSPACE LTD<br>HAWKESBURY, ONTARIO, CANADA | REV. M<br>D2273<br>SHEET 1 OF 1<br>SCALE<br>NTS |
| DRAWN      | DB       |                                                   |                                                 |
| CHECKED    | ML       |                                                   |                                                 |
| MFG. APPR. | DD       |                                                   |                                                 |
| APPROVED   | WM       | TITLE                                             | 350 REAR LOCKER EXTENDER                        |
| DE APPR.   | DS       |                                                   |                                                 |
| DATE       | 16.05.19 |                                                   |                                                 |

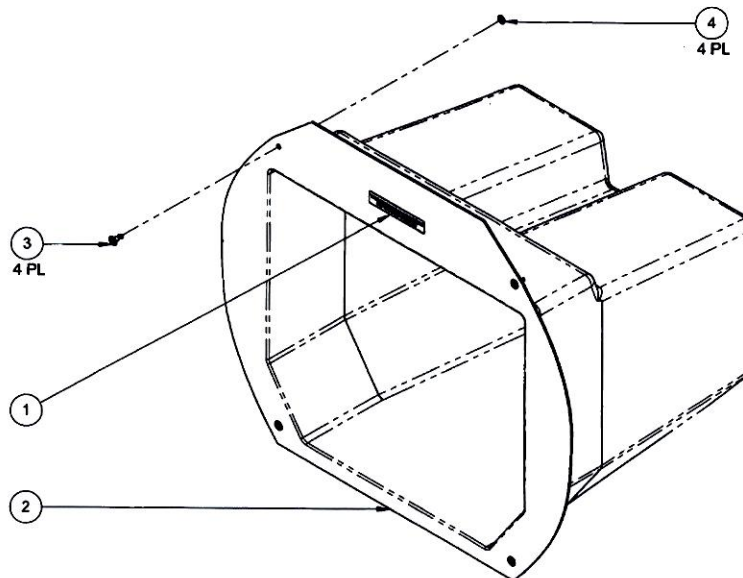
RELEASED  
2017-01-11  
EAW 17-501

APPROVED

COPYRIGHT © 1996 BY DART AEROSPACE LTD  
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.



| ITEM NO. | QTY. | PART NUMBER  | DESCRIPTION                   |
|----------|------|--------------|-------------------------------|
|          | X    | D350-604-041 | REAR LOCKER EXTENDER ASSEMBLY |
| 1        | 1    | D2268        | PLACARD                       |
| 2        | 1    | D2273        | REAR LOCKER EXTENDER          |
| 3        | 4    | 2600-6       | CAMLOCK STUD                  |
| 4        | 4    | 2600-LW      | RETAINING WASHER              |



**D350-604-041 REAR LOCKER EXTENDER ASSEMBLY**

- NOTES:
- 1) MATERIAL: N/A
  - 2) FINISH: N/A
  - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
  - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
  - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
  - 6) IDENTIFICATION: NONE
  - 7) WEIGHT: 5.5 to 7.5 lbs
  - 8) INSTALL D2268 PLACARD IN LOCATION SHOWN, CENTERED ON FLANGE

| C          | REMOVE D2728-1, D2729-1 DECALS (ZN C5-1) REVISED RELATED NOTES, UPDATED PART WEIGHT                                                         | ML                                                                                                                                                                                                                                                                                        | 13.12.16     |
|------------|---------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| B          | INCORPORATE DSI 9470 (ZN D7-1). UPDATE DWG TO CURRENT STANDARDS. ADD D2728-1 PLACARD AND ORIENTATION NOTE (ZN C3-1). ADD D2729-1 (ZN C5-1). | DC                                                                                                                                                                                                                                                                                        | 12.02.07     |
| A          | NEW ISSUE                                                                                                                                   | CP                                                                                                                                                                                                                                                                                        | 02.04.01     |
| REV.       | DESCRIPTION                                                                                                                                 | BY                                                                                                                                                                                                                                                                                        | DATE         |
| DESIGN     | DW                                                                                                                                          | <b>DART AEROSPACE LTD</b><br>HAWKESBURY, ONTARIO, CANADA                                                                                                                                                                                                                                  |              |
| DRAWN      | ML                                                                                                                                          |                                                                                                                                                                                                                                                                                           |              |
| CHECKED    | AP                                                                                                                                          | DRAWING NO.                                                                                                                                                                                                                                                                               | REV. C       |
| MFG. APPR. | JLM                                                                                                                                         | D350-604-041                                                                                                                                                                                                                                                                              | SHEET 1 OF 1 |
| APPROVED   | MP                                                                                                                                          | TITLE                                                                                                                                                                                                                                                                                     | SCALE        |
| DE APPR.   | DS                                                                                                                                          | RLE ASSY                                                                                                                                                                                                                                                                                  | NTS          |
| DATE       | 14.01.02                                                                                                                                    | <small>COPYRIGHT © 2002 BY DART AEROSPACE LTD<br/> THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small> |              |



Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
Tel: 613 632 9577  
Fax: 613 632 1053

## PURCHASE ORDER

Purchase Order ID **PO35199**

Purchase Order Date 2/3/2017 2:20:34 PM

PO Print Date 2/3/2017

Page Number 2 of 3

**Order From :** VC-FDC01  
FDC COMPOSITES INC.  
45 CHEMIN DE L'AEROPORT  
LOCAL 26  
ST-JEAN-SUR-RICHELIEU, QUEBEC J3B 7B5

**Ship To :** DART AEROSPACE LTD  
1270 ABERDEEN  
HAWKESBURY, ON K6A 1K7  
CANADA

**Contact Name**  
**Vendor Phone** 450-357-1344 ext303

**Ship To Contact**  
**Ship To Phone**  
**Ship Via:** Journey Freight collect  
**Ship Acct:**

**Buyer** Chantal Lavoie  
**Customer POID**  
**Customer Tax #** 10127-2607  
**Terms** Net 30  
**Currency** CAD  
**FOB** Destination-Collect

|   |               |                      |                               |              |          |          |
|---|---------------|----------------------|-------------------------------|--------------|----------|----------|
| 3 | D350-604-041P | Rear Locker Extender | 8/17/2017<br>Yes<br>8/17/2017 | 1.00<br>Each | \$705.00 | \$705.00 |
|---|---------------|----------------------|-------------------------------|--------------|----------|----------|

AS PER DWG D2273 REV. M / D350-604-041 REV. C  
B156636  
PLEASE NOTE REARLOCKER UNDER NEW REV. M

*SPT-8-21*

**Line Total:** \$705.00

|   |               |                      |                               |              |          |          |
|---|---------------|----------------------|-------------------------------|--------------|----------|----------|
| 4 | D350-604-041P | Rear Locker Extender | 8/17/2017<br>Yes<br>8/17/2017 | 1.00<br>Each | \$705.00 | \$705.00 |
|---|---------------|----------------------|-------------------------------|--------------|----------|----------|

AS PER DWG D2273 REV. M / D350-604-041 REV. C  
B156637  
PLEASE NOTE REARLOCKER UNDER NEW REV. M

**Line Total:** \$705.00

|   |               |                      |                               |              |          |          |
|---|---------------|----------------------|-------------------------------|--------------|----------|----------|
| 5 | D350-604-041P | Rear Locker Extender | 8/17/2017<br>Yes<br>8/17/2017 | 1.00<br>Each | \$705.00 | \$705.00 |
|---|---------------|----------------------|-------------------------------|--------------|----------|----------|

AS PER DWG D2273 REV. M / D350-604-041 REV. C  
B156638  
PLEASE NOTE REARLOCKER UNDER NEW REV. M

**PO Instructions:** NOTE: NO BILLING PRIOR TO SHIPPING

**Note:**

DAS  
38  
9-89

2/3/2017

FDC Composites inc.  
45, Chemin de L'Aéroport  
Local 26  
Saint-Jean-sur-Richelieu (QC)  
J3B 7B5  
**Tel. : 450 357-1344**

## Shipping Order

15/08/2017

**Order** : 2668  
**Reference** : PO 35199/1-5

**Customer:** DAE-CAD

Dart Aerospace  
1270 Aberdeen Street  
Hawksbury, ON  
K6A 1K7

**Ship To**  
Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawksbury, ON  
K6A 1K7  
**Tel. : 1 613 632-9577**

| Item No.      | Description                                                                                   | Qty | Qty. Delivere | B/O Qty |
|---------------|-----------------------------------------------------------------------------------------------|-----|---------------|---------|
| D350-604-041P | REAR LOCKER EXTENDER<br>PO item: 35199/1<br>Lot: 2017-02-20<br>FDC ID : DAE001-106<br>B156634 | 1   | _____         | _____   |
| D350-604-041P | REAR LOCKER EXTENDER<br>PO item: 35199/2<br>Lot: 2017-02-21<br>FDC ID: DAE001-108<br>B156635  | 1   | _____         | _____   |
| D350-604-041P | REAR LOCKER EXTENDER<br>PO item: 35199/3<br>Lot: 2017-02-22<br>FDC ID: DAE001-110<br>B156636  | 1   | _____         | _____   |
| D350-604-041P | REAR LOCKER EXTENDER<br>PO item: 35199/4<br>Lot: 2017-02-22<br>FDC ID: DAE001-112<br>B156637  | 1   | _____         | _____   |
| D350-604-041P | REAR LOCKER EXTENDER<br>PO item: 35199/5<br>Lot: 2017-02-23<br>FDC ID: DAE001-113<br>B156638  | 1   | _____         | _____   |

DAE  
38  
9-89

SON-8-21.

**Shipping** : \_\_\_\_\_  
**Package No** : \_\_\_\_\_

**Ref.** : \_\_\_\_\_

**Merchandise Received:** \_\_\_\_\_





©The information in this document is FDC (FDC composites inc.) Proprietary Information and is disclosed in confidence. If you are not the intended recipient you are hereby notified that any disclosure, copying, distribution or use of any of the information contained in or attached to this transmission is STRICTLY PROHIBITED.

### CERTIFICATE of CONFORMITY

Customer Name: Dart Aerospace.

Customer P/O Number: 35199

Revision: NC

| <u>PO Item</u> | <u>Qty</u> | <u>Part number</u> | <u>Dwg number</u> | <u>Description</u>       | <u>Dart ID</u> | <u>FDC ID</u> | <u>Lot</u> |
|----------------|------------|--------------------|-------------------|--------------------------|----------------|---------------|------------|
| 1              | 1          | D350-604-041P      | D2273 Rev M       | 350 Rear Locker Extender | B156634        | DAE001-106    | 2017-02-20 |
| 2              | 1          | D350-604-041P      | D2273 Rev M       | 350 Rear Locker Extender | B156635        | DAE001-108    | 2017-02-21 |
| 3              | 1          | D350-604-041P      | D2273 Rev M       | 350 Rear Locker Extender | B156636        | DAE001-110    | 2017-02-22 |
| 4              | 1          | D350-604-041P      | D2273 Rev M       | 350 Rear Locker Extender | B156637        | DAE001-112    | 2017-02-22 |
| 5              | 1          | D350-604-041P      | D2273 Rev M       | 350 Rear Locker Extender | B156638        | DAE001-113    | 2017-02-23 |

I hereby certify that the workmanship, material and the processes used in the manufacture of the above part(s) supplied are in accordance with the requirements of the applicable Purchase Order.

Signature: Marjorie Geoffrion  
Marjorie Geoffrion, Quality Inspector

Date: 2017-08-15



## Gamme de Fabrication

|             |            |
|-------------|------------|
| # LOT       | 2017-02-22 |
| # SÉRIE(ID) | DAE001-110 |

|                          |                                           |
|--------------------------|-------------------------------------------|
| Nom de Gamme :           | Rear locker extender - DART               |
| # de Gamme (et rev.) :   | DAE001 Rev. D                             |
| Nom pièce - Client :     | 350 Rear locker extender - DART AEROSPACE |
| # de Dessins (et rev.) : | D2273 Rev. J                              |

ID: B156636 #3

## Fiche suiveuse

| PLAGE (ÉTAPES) | DÉPARTEMENTS      | DESCRIPTION GÉNÉRALE                                      | DATE(HR) SORTIE                                                |
|----------------|-------------------|-----------------------------------------------------------|----------------------------------------------------------------|
| [10-60]        | Préparation       | Moule, Espace de travail, Matière premières, Consommables | #23<br>09 FEV 2017<br>#26<br>21 FEV 2017                       |
| [70-90]        | Finition/Peinture | Appliquer Gel coat, Inspecter                             | #3<br>22 FEV 2017                                              |
| [100-150]      | Laminage          | Laminer, Démouler, Inspecter                              | #26<br>21 FEV 2017<br>#23<br>22 FEV 2017<br>#19<br>21 FEV 2017 |
| [160-200]      | Usinage           | Percer, Découper, Ébavurer, Inspecter, Sabler             | #30<br>9 MAR 2017                                              |
| [210-230]      | Finition/Peinture | Primer, Inspection                                        | #3<br>MARS<br>28 MAR 2017                                      |
| 240            | Expédition        | Emballer, Expédier                                        | #18<br>26 JUIN 2016                                            |

Gamme préparé par :

Guillaume G.Jasmin

Gamme révisée par :

Francis Lavigne-Larente

Gamme vérifiée par

Maxime Gagné

(Chefs d'équipe) :

Gamme approuvée par :

Maxime Gagné

Date d'émission :

2015-01-14

### Approbation Qualité

Avant de produire le CofC, toutes les étapes et les informations requises des gammes subséquentes reliées à ce produit ont été complétées et remplies

Inspecteur

Qualité

Informations à remplir :

Cases grises pâles

Inspection :

Cases grises foncées



## Matières premières

| Matériel Requis (Nom abrégé)      | # de lot       | Date d'expiration | Spécification et/ou identification                    |
|-----------------------------------|----------------|-------------------|-------------------------------------------------------|
| Résine                            | 1028612        | 2017-05-17        | Dion 7704                                             |
| Norox (Résine)                    | 41049          | 2017-08-01        | MEKP-9                                                |
| Norox (Gel coat)                  | 41049          | 2017-08-01        | MEKP-9                                                |
| Gel coat blanc                    | 702-284        | 2017-03-20        | -Polycor 2330PAWK745 55X3535                          |
| Mat ¾ oz/pi²                      | 150511-00174-1 | N/A               | ¾ oz Chopped Strand Mat (Owens Corning Or Equivalent) |
| Fibre de verre 7725               | 4294874        | N/A               | Hexcel 7725 Fiber Glass                               |
| Noyau DIAB F40 1/8po              | N/A            | N/A               | , 1/8 thick                                           |
| Apprêt (Primer) (Vert)            | 18316          | 2018-05-01        | Tempo 4500-PB-23G (Vert)                              |
| Durcisseur pour apprêt (hardener) | 18317          | 2018-05-01        | Tempo 4500-C-23                                       |
| Attache mécanique (Camloc)        | 508980         | N/A               | 2600-5                                                |
| Rondelle de retenue pour Camloc   | 1745658        | N/A               | 2600-LW                                               |

| Équipement                                               | Matériel auxiliaire      | Santé et sécurité     |
|----------------------------------------------------------|--------------------------|-----------------------|
| Moule : <b>MOU306 ou MOU309</b>                          | FMS                      | Sarrau                |
| Pompe à vide                                             | 55NC                     | Lunettes de sécurité  |
| Jig de découpe et perçage : <b>GAB350</b>                | Peel ply                 | Soulier de protection |
| Jig de finition et d'inspection : <b>GAB355</b>          | Film perforé             | Gants                 |
| Conformateurs : <b>GAB356 à GAB364</b> (Qte 9)           | Bleeder breather         | Masques à cartouches  |
| Pince pour installer Camloc : <b>OUT951</b>              | Bag big blue             |                       |
| Outil pour installer rondelle de retenue : <b>OUT952</b> | Ruban scellant (Dum Dum) |                       |

| Documents auxiliaires               |
|-------------------------------------|
| Annexe 1                            |
| Formulaire de résine (RES-DAR001)   |
|                                     |
| <del>MOULE : MOU306 ou MOU309</del> |

| MPS                  | Description                          |
|----------------------|--------------------------------------|
| MPS-300-93-31-007-NC | Démoulage 55NC                       |
| MPS-300-93-31-058-A  | Composite part inspection            |
| MPS-300-93-31-020-B  | Edge finish after trimming           |
| MPS-300-93-31-097-NC | Epoxy - Polyamide primer             |
| MPS-300-93-31-084-NC | Protection et entreposage des pièces |

## Suivi des révisions

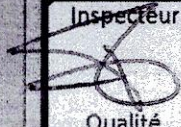
| # de révision | Contenu (et étape) de la révision                                                                                       | Date de révision | Révisé par :         |
|---------------|-------------------------------------------------------------------------------------------------------------------------|------------------|----------------------|
| A             | Révision d'une OP inspection, Ajout nouveaux moules et retrait d'un type de primer                                      | 2015-03-04       | Guillaume G.Jasmin   |
| B             | Ajout des conformateurs, du gabarit GAB355, de l'installation des camlocs, inspection du poids et identification finale | 2015-03-25       | Guillaume G.Jasmin   |
| C             | Mise à jour de la case approbation qualité page 1                                                                       | 2015-04-02       | Guillaume G.Jasmin   |
| D             | Ajout du noyau sur le contour de la pièce                                                                               | 2015-09-28       | Philippe Paquette-B. |



| Opération                             | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Références, outils et équipements                 | Date et Initiales   |
|---------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|---------------------|
| <b><u>Section A : PRÉPARATION</u></b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                   |                     |
| 10                                    | <u>Remplir les informations requises sur la première page (cases grises pâles)</u> <ul style="list-style-type: none"> <li>• Demander au coordonnateur de production (ID)</li> <li>• Inscrire les heures et les dates d'entrée et de sortie de département</li> </ul>                                                                                                                                                                                                                           |                                                   | #23<br>09 FEV. 2017 |
| 20                                    | <u>Découper la fibre et les périssables (Peel ply, sac étanche...) selon l'ANNEXE 1</u> <ul style="list-style-type: none"> <li>• ACHEMINER et REMPLIR la section « Matière premières » pour : <ul style="list-style-type: none"> <li>- Fibre de verre 7725</li> <li>- Mat ¾ oz</li> </ul> </li> </ul>                                                                                                                                                                                          | Annexe 1                                          | #23<br>09 FEV. 2017 |
| 30                                    | <u>Découper les nouveaux selon l'ANNEXE 1</u> <ul style="list-style-type: none"> <li>• ACHEMINER et REMPLIR la section « Matière premières » pour : <ul style="list-style-type: none"> <li>- Noyau DIAB F40 1/8po</li> </ul> </li> </ul>                                                                                                                                                                                                                                                       | Annexe 1                                          | N/A                 |
| 40                                    | <u>Préparer la résine selon RES-DAR001 (Gamme de formulation de résine)</u> <p>ACHEMINER et REMPLIR la section « Matière premières » pour :</p> <ul style="list-style-type: none"> <li>- Résine</li> <li>- Norox</li> </ul>                                                                                                                                                                                                                                                                    | RES-DAR001                                        | 22 FEV. 2017<br>8Z# |
| 50                                    | <p>PRÉPARER le moule</p> <p>- <b>Cochez le moule utilisé :</b> MOU306 <input type="checkbox"/>, MOU309 <input checked="" type="checkbox"/></p> <p><input checked="" type="checkbox"/> Nettoyer et traiter le moule</p> <p><input checked="" type="checkbox"/> Poser le Masking tape</p> <p><u>Si nécessaire, traiter le moule au 55NC</u></p> <ul style="list-style-type: none"> <li>• Faire le test de pelage, s'il ne passe pas, appliquer une couche de 55NC et refaire le test.</li> </ul> | Annexe 1<br>MOU306 ou MOU309<br>MPS-300-93-31-007 | #26<br>21 FEV. 2017 |

| 60  | PRÉPARER l'espace de travail (pendant l'application du gel coat)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                         | #21<br>21 FEB 2017<br><br>#23<br>21 FEB 2017 |                 |          |                 |     |                         |          |     |                     |          |     |                     |          |     |                     |          |     |                      |          |     |                     |          |     |                     |          |     |                     |          |
|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|----------------------------------------------|-----------------|----------|-----------------|-----|-------------------------|----------|-----|---------------------|----------|-----|---------------------|----------|-----|---------------------|----------|-----|----------------------|----------|-----|---------------------|----------|-----|---------------------|----------|-----|---------------------|----------|
|     | <input checked="" type="checkbox"/> Vérifier et préparer la pompe<br><input checked="" type="checkbox"/> Préparer et distribuer les outils<br><input checked="" type="checkbox"/> Protéger l'environnement de travail (tables, plancher, etc.)<br><input checked="" type="checkbox"/> Vêtir l'équipement de protection personnel<br><input checked="" type="checkbox"/> Partir la ventilation<br><input checked="" type="checkbox"/> Vérifier l'ordre et la présence de tous les plis de fibre et des morceaux de noyau dans le sac                                                                                                                                                                                                |                         |                                              |                 |          |                 |     |                         |          |     |                     |          |     |                     |          |     |                     |          |     |                      |          |     |                     |          |     |                     |          |     |                     |          |
|     | <table border="1"> <thead> <tr> <th>Position</th> <th>Matériel</th> <th>Initial employé</th> </tr> </thead> <tbody> <tr> <td>10F</td> <td>¾ oz Chopped strand MAT</td> <td>MT Jeani</td> </tr> <tr> <td>20F</td> <td>7725 Fibre de verre</td> <td>MT Jeani</td> </tr> <tr> <td>30F</td> <td>7725 Fibre de verre</td> <td>MT Jeani</td> </tr> <tr> <td>40R</td> <td>7725 Fibre de verre</td> <td>MT Jeani</td> </tr> <tr> <td>50C</td> <td>Noyau DIAB F40 1/8po</td> <td>MT Jeani</td> </tr> <tr> <td>60R</td> <td>7725 Fibre de verre</td> <td>MT Jeani</td> </tr> <tr> <td>70R</td> <td>7725 Fibre de verre</td> <td>MT Jeani</td> </tr> <tr> <td>80F</td> <td>7725 Fibre de verre</td> <td>MT Jeani</td> </tr> </tbody> </table> |                         |                                              | Position        | Matériel | Initial employé | 10F | ¾ oz Chopped strand MAT | MT Jeani | 20F | 7725 Fibre de verre | MT Jeani | 30F | 7725 Fibre de verre | MT Jeani | 40R | 7725 Fibre de verre | MT Jeani | 50C | Noyau DIAB F40 1/8po | MT Jeani | 60R | 7725 Fibre de verre | MT Jeani | 70R | 7725 Fibre de verre | MT Jeani | 80F | 7725 Fibre de verre | MT Jeani |
|     | Position                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Matériel                |                                              | Initial employé |          |                 |     |                         |          |     |                     |          |     |                     |          |     |                     |          |     |                      |          |     |                     |          |     |                     |          |     |                     |          |
|     | 10F                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | ¾ oz Chopped strand MAT |                                              | MT Jeani        |          |                 |     |                         |          |     |                     |          |     |                     |          |     |                     |          |     |                      |          |     |                     |          |     |                     |          |     |                     |          |
|     | 20F                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 7725 Fibre de verre     |                                              | MT Jeani        |          |                 |     |                         |          |     |                     |          |     |                     |          |     |                     |          |     |                      |          |     |                     |          |     |                     |          |     |                     |          |
|     | 30F                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 7725 Fibre de verre     |                                              | MT Jeani        |          |                 |     |                         |          |     |                     |          |     |                     |          |     |                     |          |     |                      |          |     |                     |          |     |                     |          |     |                     |          |
|     | 40R                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 7725 Fibre de verre     |                                              | MT Jeani        |          |                 |     |                         |          |     |                     |          |     |                     |          |     |                     |          |     |                      |          |     |                     |          |     |                     |          |     |                     |          |
|     | 50C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Noyau DIAB F40 1/8po    |                                              | MT Jeani        |          |                 |     |                         |          |     |                     |          |     |                     |          |     |                     |          |     |                      |          |     |                     |          |     |                     |          |     |                     |          |
|     | 60R                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 7725 Fibre de verre     |                                              | MT Jeani        |          |                 |     |                         |          |     |                     |          |     |                     |          |     |                     |          |     |                      |          |     |                     |          |     |                     |          |     |                     |          |
| 70R | 7725 Fibre de verre                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | MT Jeani                |                                              |                 |          |                 |     |                         |          |     |                     |          |     |                     |          |     |                     |          |     |                      |          |     |                     |          |     |                     |          |     |                     |          |
| 80F | 7725 Fibre de verre                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | MT Jeani                |                                              |                 |          |                 |     |                         |          |     |                     |          |     |                     |          |     |                     |          |     |                      |          |     |                     |          |     |                     |          |     |                     |          |

## Section B : APPLICATION GEL COAT

|                     |                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                           |                      |                                |
|---------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|--------------------------------|
| 70                  | <b>(GEL COAT) : ACHEMINER et REMPLIR la section « Matière premières » pour :</b> <ul style="list-style-type: none"> <li>Gel coat</li> </ul>                                                                                        | #28<br>22 FEB. 2017                                                                                                                                                                                                                       |                      |                                |
| 80                  | APPLIQUER le Gel coat (18 - 22 mils)<br><table border="1" style="width: 100%;"> <tr> <td style="width: 40%;">Heure d'application</td> <td style="width: 60%;">09 10<br/>06 h 50 min</td> </tr> </table>                            | Heure d'application                                                                                                                                                                                                                       | 09 10<br>06 h 50 min | Annexe 1<br>#3<br>22 FEB. 2017 |
| Heure d'application | 09 10<br>06 h 50 min                                                                                                                                                                                                               |                                                                                                                                                                                                                                           |                      |                                |
| 90                  | <b>Point d'inspection (Inspecteur Qualité) :</b><br><input checked="" type="checkbox"/> Épaisseur du gel coat : 18 - 22 mils<br><input checked="" type="checkbox"/> Qualité de l'application du gel coat : Uniforme et esthétique. | <div style="border: 1px solid black; padding: 5px; display: inline-block;">         Inspecteur<br/> <br/>         Qualité       </div><br>2017-02-22 |                      |                                |



## Section C : LAMINAGE

| 100                               | <p><b>Points d'inspection (Inspecteur Qualité ou Chef d'Équipe) :</b></p> <p><input checked="" type="checkbox"/> Donner l'approbation pour que la pièce puisse être laminée (le gel coat est « amoureux » ou « tack free »)</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;">             Inspecteur<br/> <br/>             Qualité           </div> |          |     |                         |     |                     |     |                     |     |                     |     |                      |     |                     |     |                     |     |                     |     |          |     |                          |     |                    |     |                       |     |              |                      |            |                                   |             |                             |         |                                                                                                                                                             |
|-----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-----|-------------------------|-----|---------------------|-----|---------------------|-----|---------------------|-----|----------------------|-----|---------------------|-----|---------------------|-----|---------------------|-----|----------|-----|--------------------------|-----|--------------------|-----|-----------------------|-----|--------------|----------------------|------------|-----------------------------------|-------------|-----------------------------|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 110                               | <p>LAMINER</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-bottom: 10px;"> <thead> <tr> <th style="width: 30%;">Position</th> <th style="width: 70%;">Matériel</th> </tr> </thead> <tbody> <tr><td>10F</td><td>¾ oz Chopped strand MAT</td></tr> <tr><td>20F</td><td>7725 Fibre de verre</td></tr> <tr><td>30F</td><td>7725 Fibre de verre</td></tr> <tr><td>40R</td><td>7725 Fibre de verre</td></tr> <tr><td>50C</td><td>Noyau DIAB F40 1/8po</td></tr> <tr><td>60R</td><td>7725 Fibre de verre</td></tr> <tr><td>70R</td><td>7725 Fibre de verre</td></tr> <tr><td>80F</td><td>7725 Fibre de verre</td></tr> </tbody> </table> <p>CONSOMMABLE</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-bottom: 10px;"> <tbody> <tr><td>10F</td><td>Peel Ply</td></tr> <tr><td>20F</td><td>Release film non perforé</td></tr> <tr><td>30F</td><td>Bleeder / Breather</td></tr> <tr><td>40F</td><td>Conformateurs (Qte 9)</td></tr> <tr><td>50F</td><td>Bagging bleu</td></tr> </tbody> </table> <p> <input checked="" type="checkbox"/> S'assurer que tous les plis dans le tableau ont été laminés<br/> <input checked="" type="checkbox"/> S'assurer que tous les conformateurs (Qte 9) sont en place par-dessus le Bleeder/Breather         </p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td style="width: 40%;">Heure début laminage</td> <td style="width: 60%; text-align: center;">9 h 30 min</td> </tr> <tr> <td>Heure mise sous-vide (sac scellé)</td> <td style="text-align: center;">10 h 30 min</td> </tr> <tr> <td>Intensité du vide (25 inHg)</td> <td style="text-align: center;">25 inHg</td> </tr> </tbody> </table> | Position                                                                                                                                                                                                                                           | Matériel | 10F | ¾ oz Chopped strand MAT | 20F | 7725 Fibre de verre | 30F | 7725 Fibre de verre | 40R | 7725 Fibre de verre | 50C | Noyau DIAB F40 1/8po | 60R | 7725 Fibre de verre | 70R | 7725 Fibre de verre | 80F | 7725 Fibre de verre | 10F | Peel Ply | 20F | Release film non perforé | 30F | Bleeder / Breather | 40F | Conformateurs (Qte 9) | 50F | Bagging bleu | Heure début laminage | 9 h 30 min | Heure mise sous-vide (sac scellé) | 10 h 30 min | Intensité du vide (25 inHg) | 25 inHg | <p>Annexe 1<br/>GAB356 à GAB364 (Qte 9)</p> <p>#23<br/>22 FEV. 2017</p> <p>#21<br/>22 FEV. 2017</p> <p>#19<br/>21 FEV. 2017</p> <p>#26<br/>21 FEV. 2017</p> |
| Position                          | Matériel                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                    |          |     |                         |     |                     |     |                     |     |                     |     |                      |     |                     |     |                     |     |                     |     |          |     |                          |     |                    |     |                       |     |              |                      |            |                                   |             |                             |         |                                                                                                                                                             |
| 10F                               | ¾ oz Chopped strand MAT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                    |          |     |                         |     |                     |     |                     |     |                     |     |                      |     |                     |     |                     |     |                     |     |          |     |                          |     |                    |     |                       |     |              |                      |            |                                   |             |                             |         |                                                                                                                                                             |
| 20F                               | 7725 Fibre de verre                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                    |          |     |                         |     |                     |     |                     |     |                     |     |                      |     |                     |     |                     |     |                     |     |          |     |                          |     |                    |     |                       |     |              |                      |            |                                   |             |                             |         |                                                                                                                                                             |
| 30F                               | 7725 Fibre de verre                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                    |          |     |                         |     |                     |     |                     |     |                     |     |                      |     |                     |     |                     |     |                     |     |          |     |                          |     |                    |     |                       |     |              |                      |            |                                   |             |                             |         |                                                                                                                                                             |
| 40R                               | 7725 Fibre de verre                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                    |          |     |                         |     |                     |     |                     |     |                     |     |                      |     |                     |     |                     |     |                     |     |          |     |                          |     |                    |     |                       |     |              |                      |            |                                   |             |                             |         |                                                                                                                                                             |
| 50C                               | Noyau DIAB F40 1/8po                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                    |          |     |                         |     |                     |     |                     |     |                     |     |                      |     |                     |     |                     |     |                     |     |          |     |                          |     |                    |     |                       |     |              |                      |            |                                   |             |                             |         |                                                                                                                                                             |
| 60R                               | 7725 Fibre de verre                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                    |          |     |                         |     |                     |     |                     |     |                     |     |                      |     |                     |     |                     |     |                     |     |          |     |                          |     |                    |     |                       |     |              |                      |            |                                   |             |                             |         |                                                                                                                                                             |
| 70R                               | 7725 Fibre de verre                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                    |          |     |                         |     |                     |     |                     |     |                     |     |                      |     |                     |     |                     |     |                     |     |          |     |                          |     |                    |     |                       |     |              |                      |            |                                   |             |                             |         |                                                                                                                                                             |
| 80F                               | 7725 Fibre de verre                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                    |          |     |                         |     |                     |     |                     |     |                     |     |                      |     |                     |     |                     |     |                     |     |          |     |                          |     |                    |     |                       |     |              |                      |            |                                   |             |                             |         |                                                                                                                                                             |
| 10F                               | Peel Ply                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                    |          |     |                         |     |                     |     |                     |     |                     |     |                      |     |                     |     |                     |     |                     |     |          |     |                          |     |                    |     |                       |     |              |                      |            |                                   |             |                             |         |                                                                                                                                                             |
| 20F                               | Release film non perforé                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                    |          |     |                         |     |                     |     |                     |     |                     |     |                      |     |                     |     |                     |     |                     |     |          |     |                          |     |                    |     |                       |     |              |                      |            |                                   |             |                             |         |                                                                                                                                                             |
| 30F                               | Bleeder / Breather                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                    |          |     |                         |     |                     |     |                     |     |                     |     |                      |     |                     |     |                     |     |                     |     |          |     |                          |     |                    |     |                       |     |              |                      |            |                                   |             |                             |         |                                                                                                                                                             |
| 40F                               | Conformateurs (Qte 9)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                    |          |     |                         |     |                     |     |                     |     |                     |     |                      |     |                     |     |                     |     |                     |     |          |     |                          |     |                    |     |                       |     |              |                      |            |                                   |             |                             |         |                                                                                                                                                             |
| 50F                               | Bagging bleu                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                    |          |     |                         |     |                     |     |                     |     |                     |     |                      |     |                     |     |                     |     |                     |     |          |     |                          |     |                    |     |                       |     |              |                      |            |                                   |             |                             |         |                                                                                                                                                             |
| Heure début laminage              | 9 h 30 min                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                    |          |     |                         |     |                     |     |                     |     |                     |     |                      |     |                     |     |                     |     |                     |     |          |     |                          |     |                    |     |                       |     |              |                      |            |                                   |             |                             |         |                                                                                                                                                             |
| Heure mise sous-vide (sac scellé) | 10 h 30 min                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                    |          |     |                         |     |                     |     |                     |     |                     |     |                      |     |                     |     |                     |     |                     |     |          |     |                          |     |                    |     |                       |     |              |                      |            |                                   |             |                             |         |                                                                                                                                                             |
| Intensité du vide (25 inHg)       | 25 inHg                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                    |          |     |                         |     |                     |     |                     |     |                     |     |                      |     |                     |     |                     |     |                     |     |          |     |                          |     |                    |     |                       |     |              |                      |            |                                   |             |                             |         |                                                                                                                                                             |
| 120                               | <p>LAISSER POLYMÉRISER la pièce sous vide pendant 2h</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <p>N/A</p>                                                                                                                                                                                                                                         |          |     |                         |     |                     |     |                     |     |                     |     |                      |     |                     |     |                     |     |                     |     |          |     |                          |     |                    |     |                       |     |              |                      |            |                                   |             |                             |         |                                                                                                                                                             |



|     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                        |                    |
|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| 130 | <p><u>DÉMOULER et IDENTIFIER la pièce</u></p> <p><input checked="" type="checkbox"/> Brancher le système d'air comprimé</p> <p><input checked="" type="checkbox"/> Écrire le numéro de pièce et la date sur un collant<br/>– # de lot (date de début) – # de série ID<br/>Ex : (AAAAAMMJJ) – (DAE001-XXX)</p> <p><input checked="" type="checkbox"/> Découper une pellicule de plastique protecteur bleu et la coller sur le rebord et à l'intérieur de la partie blanche (Gel coat) (Voir Annexe 1)</p> <p><input checked="" type="checkbox"/> Placer la pièce sur la table d'inspection</p> | Annexe 1                                                                                                                                               | #26<br>21 FEB 2017 |
| 140 | <p><u>Point d'inspection (inspecteur qualité) :</u></p> <p><input checked="" type="checkbox"/> Identifier la présence de surplus de résine</p> <p><input checked="" type="checkbox"/> Identifier la présence de bulles d'air</p> <p><input checked="" type="checkbox"/> Identifier la présence de zone sèche</p> <p><input checked="" type="checkbox"/> Identifier la présence de plis dans la fibre</p>                                                                                                                                                                                      | <p>MPS-300-93-31-058</p> <p>Inspecteur  Qualité</p> <p>2017-02-23</p> |                    |
| 150 | <p><u>Nettoyer le moule</u></p> <ul style="list-style-type: none"> <li>Enlever la résine durcie tout le tour du moule avec une spatule en plastique pour ne pas endommager le moule</li> <li><u>Si nécessaire</u>, nettoyer le moule avec un chiffon légèrement humecté de nettoyant à moule (PMC)<br/>NE PAS TROP APPLIQUER DE "PMC"</li> </ul>                                                                                                                                                                                                                                              | Spatule en plastique                                                                                                                                   | 2017-02-23<br>AB   |

## Section D : USINAGE

|     |                                                                                                                                                                                                                                                                                                                                                                                                 |                                                              |                                                                                                                                                                            |
|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 160 | <p><u>PERÇAGE ET DÉCOUPE :</u></p> <p>INSTALLER le Gabarit de perçage et découpe</p> <p>PERÇER la pièce</p> <ul style="list-style-type: none"> <li>Perçer 4 trous avec un forêt F (Dia. .257 po) au travers des canons de perçage du Gabarit <b>GAB350</b></li> </ul> <p>DÉCOUPER la pièce</p> <ul style="list-style-type: none"> <li>Retirer le Gabarit de découpe une fois terminé</li> </ul> | <p><b>GAB350</b><br/>Annexe 1<br/>Forêt F (Dia. .257 po)</p> | #30<br>9 MAR 2017                                                                                                                                                          |
| 170 | <p><u>SABLAGE :</u></p> <p>INSTALLER le Gabarit de finition et d'inspection <b>GAB355</b></p> <p>SABLER la pièce jusqu'à arriver à la dimension du Gabarit <b>GAB355</b> (voir Annexe 1)</p> <p>RETIRER le Gabarit</p> <p>ÉBAVURER les arêtes vives</p>                                                                                                                                         | <p><b>GAB355</b><br/>Annexe 1<br/>MPS-300-93-31-020</p>      | <br> |



|     |                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                               |                                                                                     |
|-----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|-------------------------------------------------------------------------------------|
| 180 | <p><b>Point d'inspection (inspecteur qualité) :</b></p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Plier les flanges (rebords) afin de s'assurer que le Gel coat ne craque pas (Voir Annexe 1 pour ce test)</li> <li><input checked="" type="checkbox"/> Vérifier la conformité de la pièce (Dimensions) selon le no. de dessin et selon le MPS-300-93-31-058</li> </ul> <p style="text-align: right;"><i>Reparation</i></p> | Annexe 1<br>MPS-300-93-31-058 |  |
|-----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|-------------------------------------------------------------------------------------|

|     |                                                                                                                            |  |                    |
|-----|----------------------------------------------------------------------------------------------------------------------------|--|--------------------|
| 190 | <p>SABLER légèrement l'extérieur de la pièce</p> <ul style="list-style-type: none"> <li>Papier 120 à 320 grains</li> </ul> |  | #26<br>14 MAR 2017 |
| 200 | NETTOYER les surfaces extérieures                                                                                          |  | #3<br>28 AVR 2017  |

## Section E : FINITION/PEINTURE

|     |                                                                                                                                                                                                                                                                                                                                                                                                                                |                                     |                                                                                       |
|-----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|---------------------------------------------------------------------------------------|
| 210 | <p>APPLIQUER le primer</p> <ul style="list-style-type: none"> <li>2 couches d'environ 10 mils chacune</li> </ul>                                                                                                                                                                                                                                                                                                               | MPS-300-93-31-097                   | #3<br>28 MAR 2017                                                                     |
| 220 | <p>INSTALLER les attaches mécaniques (Camlocs) (Qte 4) (voir Annexe 1)</p> <ul style="list-style-type: none"> <li>Utiliser les pinces spécialisées (OUT951) pour insérer les Camlocs dans les trous</li> <li>Utiliser l'outil spécialisé (OUT952) pour installer les rondelles de retenues</li> </ul>                                                                                                                          | Annexe 1<br>Pince à Camloc (OUT951) | 2 MAR 2017<br><i>JM</i>                                                               |
| 230 | <p><b>Inspection finale :</b></p> <ul style="list-style-type: none"> <li>Validation de la finition (pinholes, surface inégale, etc...)</li> <li>Vérifier s'il y a un panneau de contrôle relié à la pièce</li> <li>Étamper le carré dans le coin inférieur droit de la première page</li> <li>Identifier la pièce finale (voir Annexe 1) pour exemple et localisation</li> <li>Poids de la pièce : <u>6,4</u> (LBS)</li> </ul> | Annexe 1<br>MPS-300-93-31-058       |  |

## Section F : EXPÉDITION

|     |                      |                   |                    |
|-----|----------------------|-------------------|--------------------|
| 240 | Emballer et expédier | MPS-300-93-31-084 | #18<br>26 JUL 2016 |
|-----|----------------------|-------------------|--------------------|





## Gamme de Fabrication

|             |            |
|-------------|------------|
| # LOT       | 2017-02-20 |
| # SÉRIE(ID) | DAE001-110 |

|                          |                                           |
|--------------------------|-------------------------------------------|
| Nom de Gamme :           | Rear locker extender - DART               |
| # de Gamme (et rev.) :   | DAE001 Rev. D                             |
| Nom pièce - Client :     | 350 Rear locker extender - DART AEROSPACE |
| # de Dessins (et rev.) : | D2273 Rev. J                              |

ID: B156636 #3

### Fiche suiveuse

| PLAGE (ÉTAPES) | DÉPARTEMENTS      | DESCRIPTION GÉNÉRALE                                      | DATE(HR) SORTIE                                          |
|----------------|-------------------|-----------------------------------------------------------|----------------------------------------------------------|
| [10-60]        | Préparation       | Moule, Espace de travail, Matière premières, Consommables | #23<br>09 FEV 2017 #26<br>21 FEV 2017                    |
| [70-90]        | Finition/Peinture | Appliquer Gel coat, Inspecter                             | #3<br>22 FEV 2017                                        |
| [100-150]      | Laminage          | Laminer, Démouler, Inspecter                              | #26<br>21 FEV 2017 #23<br>22 FEV 2017 #10<br>21 FEV 2017 |
| [160-200]      | Usinage           | Percer, Découper, Ébavurer, Inspecter, Sabler             | #30<br>9 MAR 2017                                        |
| [210-230]      | Finition/Peinture | Primer, Inspection                                        | #3<br>28 MAR 2017                                        |
| 240            | Expédition        | Emballer, Expédier                                        | #18<br>26 JUIN 2016                                      |

Gamme préparé par :

Guillaume G.Jasmin

Gamme révisée par :

Francis Lavigne-Larente

Gamme vérifiée par

Maxime Gagné

(Chefs d'équipe) :

Gamme approuvée par :

Maxime Gagné

Date d'émission :

2015-01-14

#### Approbation Qualité

Avant de produire le CofC, toutes les étapes et les informations requises des gammes subséquentes reliées à ce produit ont été complétées et remplies



Informations à remplir :

Cases grises pâles

Inspection :

Cases grises foncées



## Matières premières

| Matériel Requis (Nom abrégé)      | # de lot       | Date d'expiration | Spécification et/ou Identification                    |
|-----------------------------------|----------------|-------------------|-------------------------------------------------------|
| Résine                            | 1028612        | 2017-05-17        | Dion 7704                                             |
| Norox (Résine)                    | 41049          | 2017-08-01        | MEKP-9                                                |
| Norox (Gel coat)                  | 41049          | 2017-08-01        | MEKP-9                                                |
| Gel coat blanc                    | 702-284        | 2017-03-20        | Polycor 2330PAWK745 55X3535                           |
| Mat ¾ oz/pi²                      | 150511-00174-1 | N/A               | ¾ oz Chopped Strand Mat (Owens Corning Or Equivalent) |
| Fibre de verre 7725               | 4294874        | N/A               | Hexcel 7725 Fiber Glass                               |
| Noyau DIAB F40 1/8po              | N/A            | N/A               | , 1/8 thick                                           |
| Apprêt (Primer) (Vert)            | 18316          | 2018-05-01        | Tempo 4500-PB-23G (Vert)                              |
| Durcisseur pour apprêt (hardener) | 18317          | 2018-05-01        | Tempo 4500-C-23                                       |
| Attache mécanique (Camloc)        | 508980         | N/A               | 2600-5                                                |
| Rondelle de retenue pour Camloc   | 1745658        | N/A               | 2600-LW                                               |

| Équipement                                               | Matériel auxiliaire      | Santé et sécurité     |
|----------------------------------------------------------|--------------------------|-----------------------|
| Moule : <b>MOU306</b> ou <b>MOU309</b>                   | FMS                      | Sarrau                |
| Pompe à vide                                             | 55NC                     | Lunettes de sécurité  |
| Jig de découpe et perçage : <b>GAB350</b>                | Peel ply                 | Soulier de protection |
| Jig de finition et d'inspection : <b>GAB355</b>          | Film perforé             | Gants                 |
| Conformateurs : <b>GAB356</b> à <b>GAB364</b> (Qte 9)    | Bleeder breather         | Masques à cartouches  |
| Pince pour installer Camloc : <b>OUT951</b>              | Bag big blue             |                       |
| Outil pour installer rondelle de retenue : <b>OUT952</b> | Ruban scellant (Dum Dum) |                       |

| Documents auxiliaires               |
|-------------------------------------|
| Annexe 1                            |
| Formulaire de résine (RES-DAR001)   |
|                                     |
| <del>MOULE : MOU306 ou MOU309</del> |

| MPS                  | Description                          |
|----------------------|--------------------------------------|
| MPS-300-93-31-007-NC | Démoulage 55NC                       |
| MPS-300-93-31-058-A  | Composite part inspection            |
| MPS-300-93-31-020-B  | Edge finish after trimming           |
| MPS-300-93-31-097-NC | Epoxy - Polyamide primer             |
| MPS-300-93-31-084-NC | Protection et entreposage des pièces |

## Suivi des révisions

| # de révision | Contenu (et étape) de la révision                                                                                       | Date de révision | Révisé par :         |
|---------------|-------------------------------------------------------------------------------------------------------------------------|------------------|----------------------|
| A             | Révision d'une OP inspection, Ajout nouveaux moules et retrait d'un type de primer                                      | 2015-03-04       | Guillaume G.Jasmin   |
| B             | Ajout des conformateurs, du gabarit GAB355, de l'installation des camlocs, inspection du poids et identification finale | 2015-03-25       | Guillaume G.Jasmin   |
| C             | Mise à jour de la case approbation qualité page 1                                                                       | 2015-04-02       | Guillaume G.Jasmin   |
| D             | Ajout du noyau sur le contour de la pièce                                                                               | 2015-09-28       | Philippe Paquette-B. |



| Opération                      | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Références, outils et équipements                 | Date et Initiales  |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|--------------------|
| <b>Section A : PRÉPARATION</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                   |                    |
| 10                             | <u>Remplir les informations requises sur la première page (cases grises pâles)</u> <ul style="list-style-type: none"> <li>Demander au coordonnateur de production (ID)</li> <li>Inscrire les heures et les dates d'entrée et de sortie de département</li> </ul>                                                                                                                                                                                                |                                                   | #23<br>09 FFV 2017 |
| 20                             | <u>Découper la fibre et les périssables (Peel ply, sac étanche...) selon l'ANNEXE 1</u> <ul style="list-style-type: none"> <li>ACHEMINER et REMPLIR la section « Matière premières » pour : <ul style="list-style-type: none"> <li>Fibre de verre 7725</li> <li>Mat ¾ oz</li> </ul> </li> </ul>                                                                                                                                                                 | Annexe 1                                          | #23<br>09 FEV 2017 |
| 30                             | <u>Découper les noyaux selon l'ANNEXE 1</u> <ul style="list-style-type: none"> <li>ACHEMINER et REMPLIR la section « Matière premières » pour : <ul style="list-style-type: none"> <li>Noyau DIAB F40 1/8po</li> </ul> </li> </ul>                                                                                                                                                                                                                              | Annexe 1                                          | N/A                |
| 40                             | <u>Préparer la résine selon RES-DAR001 (Gamme de formulation de résine)</u><br>ACHEMINER et REMPLIR la section « Matière premières » pour : <ul style="list-style-type: none"> <li>Résine</li> <li>Norox</li> </ul>                                                                                                                                                                                                                                             | RES-DAR001                                        | 22 FEV 2017<br>#28 |
| 50                             | PRÉPARER le moule<br>- Cochez le moule utilisé : MOU306 <input type="checkbox"/> , MOU309 <input checked="" type="checkbox"/><br><input checked="" type="checkbox"/> Nettoyer et traiter le moule<br><input checked="" type="checkbox"/> Poser le Masking tape<br><u>Si nécessaire, traiter le moule au 55NC</u> <ul style="list-style-type: none"> <li>Faire le test de pelage, s'il ne passe pas, appliquer une couche de 55NC et refaire le test.</li> </ul> | Annexe 1<br>MOU306 ou MOU309<br>MPS-300-93-31-007 | #26<br>21 FEV 2017 |



| 60  | PRÉPARER l'espace de travail (pendant l'application du gel coat)                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                         |                 | #23<br>21 FEB 2017 |
|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|-----------------|--------------------|
|     | <input checked="" type="checkbox"/> Vérifier et préparer la pompe<br><input checked="" type="checkbox"/> Préparer et distribuer les outils<br><input checked="" type="checkbox"/> Protéger l'environnement de travail (tables, plancher, etc.)<br><input checked="" type="checkbox"/> Vêtir l'équipement de protection personnel<br><input checked="" type="checkbox"/> Partir la ventilation<br><input checked="" type="checkbox"/> Vérifier l'ordre et la présence de tous les plis de fibre et des morceaux de noyau dans le sac |                         |                 |                    |
|     | Position                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Matériel                | Initial employé |                    |
|     | 10F                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | ¾ oz Chopped strand MAT | MT Jeani        |                    |
|     | 20F                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 7725 Fibre de verre     | MT Jeani        |                    |
|     | 30F                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 7725 Fibre de verre     | MT Jeani        |                    |
|     | 40R                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 7725 Fibre de verre     | MT Jeani        |                    |
|     | 50C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Noyau DIAB F40 1/8po    | MT Jeani        |                    |
|     | 60R                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 7725 Fibre de verre     | MT Jeani        |                    |
|     | 70R                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 7725 Fibre de verre     | MT Jeani        |                    |
| 80F | 7725 Fibre de verre                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | MT Jeani                |                 |                    |

## Section B : APPLICATION GEL COAT

|                     |                                                                                                                                                                                                                                    |                     |                                                                                                                                                                                                                             |  |  |
|---------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| 70                  | (GEL COAT) : ACHEMINER et REMPLIR la section « Matière premières » pour : <ul style="list-style-type: none"> <li>Gel coat</li> </ul>                                                                                               |                     | #28<br>22 FEB. 2017                                                                                                                                                                                                         |  |  |
| 80                  | APPLIQUER le Gel coat (18 - 22 mils)                                                                                                                                                                                               | Annexe 1            | #3<br>22 FEB. 2017                                                                                                                                                                                                          |  |  |
|                     | <table border="1" style="width: 100%;"> <tr> <td style="width: 50%;">Heure d'application</td> <td style="width: 50%;">09 h 10 min</td> </tr> </table>                                                                              | Heure d'application | 09 h 10 min                                                                                                                                                                                                                 |  |  |
| Heure d'application | 09 h 10 min                                                                                                                                                                                                                        |                     |                                                                                                                                                                                                                             |  |  |
| 90                  | <b>Point d'inspection (Inspecteur Qualité) :</b><br><input checked="" type="checkbox"/> Épaisseur du gel coat : 18 - 22 mils<br><input checked="" type="checkbox"/> Qualité de l'application du gel coat : Uniforme et esthétique. |                     | <div style="border: 1px solid black; padding: 5px; display: inline-block;">         Inspecteur<br/> <br/>         Qualité       </div> |  |  |

2017-02-22

## Section C : LAMINAGE

| 100                               | <b>Points d'inspection (Inspecteur Qualité ou Chef d'Équipe) :</b><br><input checked="" type="checkbox"/> Donner l'approbation pour que la pièce puisse être laminée (le gel coat est « amoureux » ou « tack free »)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                            | <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;">         Inspecteur<br/> <br/>         Qualité       </div> |     |                         |     |                     |     |                     |     |                     |     |                      |     |                     |     |                     |     |                     |     |          |     |                          |     |                    |     |                       |     |              |                      |            |                                   |             |                             |         |                                                               |                                                                                                      |
|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|-----|-------------------------|-----|---------------------|-----|---------------------|-----|---------------------|-----|----------------------|-----|---------------------|-----|---------------------|-----|---------------------|-----|----------|-----|--------------------------|-----|--------------------|-----|-----------------------|-----|--------------|----------------------|------------|-----------------------------------|-------------|-----------------------------|---------|---------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| 110                               | <p>LAMINER</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-bottom: 10px;"> <thead> <tr> <th style="width: 30%;">Position</th> <th style="width: 70%;">Matériel</th> </tr> </thead> <tbody> <tr><td>10F</td><td>¾ oz Chopped strand MAT</td></tr> <tr><td>20F</td><td>7725 Fibre de verre</td></tr> <tr><td>30F</td><td>7725 Fibre de verre</td></tr> <tr><td>40R</td><td>7725 Fibre de verre</td></tr> <tr><td>50C</td><td>Noyau DIAB F40 1/8po</td></tr> <tr><td>60R</td><td>7725 Fibre de verre</td></tr> <tr><td>70R</td><td>7725 Fibre de verre</td></tr> <tr><td>80F</td><td>7725 Fibre de verre</td></tr> </tbody> </table> <p>CONSOMMABLE</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-bottom: 10px;"> <tbody> <tr><td>10F</td><td>Peel Ply</td></tr> <tr><td>20F</td><td>Release film non perforé</td></tr> <tr><td>30F</td><td>Bleeder / Breather</td></tr> <tr><td>40F</td><td>Conformateurs (Qte 9)</td></tr> <tr><td>50F</td><td>Bagging bleu</td></tr> </tbody> </table> <p> <input checked="" type="checkbox"/> S'assurer que tous les plis dans le tableau ont été laminés<br/> <input checked="" type="checkbox"/> S'assurer que tous les conformateurs (Qte 9) sont en place par-dessus le Bleeder/Breather       </p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <tbody> <tr> <td style="width: 40%;">Heure début laminage</td> <td style="width: 60%; text-align: center;">9 h 30 min</td> </tr> <tr> <td>Heure mise sous-vide (sac scellé)</td> <td style="text-align: center;">16 h 30 min</td> </tr> <tr> <td>Intensité du vide (25 inHg)</td> <td style="text-align: center;">25 inHg</td> </tr> </tbody> </table> | Position                                   | Matériel                                                                                                                                            | 10F | ¾ oz Chopped strand MAT | 20F | 7725 Fibre de verre | 30F | 7725 Fibre de verre | 40R | 7725 Fibre de verre | 50C | Noyau DIAB F40 1/8po | 60R | 7725 Fibre de verre | 70R | 7725 Fibre de verre | 80F | 7725 Fibre de verre | 10F | Peel Ply | 20F | Release film non perforé | 30F | Bleeder / Breather | 40F | Conformateurs (Qte 9) | 50F | Bagging bleu | Heure début laminage | 9 h 30 min | Heure mise sous-vide (sac scellé) | 16 h 30 min | Intensité du vide (25 inHg) | 25 inHg | Annexe<br>1<br><b>GAB356</b><br>à<br><b>GAB364</b><br>(Qte 9) | #23<br>22 FEV. 2017<br><br>#21<br>22 FEV. 2017<br><br>#19<br>21 FEV. 2017<br><br>#26<br>21 FEV. 2017 |
| Position                          | Matériel                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                            |                                                                                                                                                     |     |                         |     |                     |     |                     |     |                     |     |                      |     |                     |     |                     |     |                     |     |          |     |                          |     |                    |     |                       |     |              |                      |            |                                   |             |                             |         |                                                               |                                                                                                      |
| 10F                               | ¾ oz Chopped strand MAT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                            |                                                                                                                                                     |     |                         |     |                     |     |                     |     |                     |     |                      |     |                     |     |                     |     |                     |     |          |     |                          |     |                    |     |                       |     |              |                      |            |                                   |             |                             |         |                                                               |                                                                                                      |
| 20F                               | 7725 Fibre de verre                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                            |                                                                                                                                                     |     |                         |     |                     |     |                     |     |                     |     |                      |     |                     |     |                     |     |                     |     |          |     |                          |     |                    |     |                       |     |              |                      |            |                                   |             |                             |         |                                                               |                                                                                                      |
| 30F                               | 7725 Fibre de verre                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                            |                                                                                                                                                     |     |                         |     |                     |     |                     |     |                     |     |                      |     |                     |     |                     |     |                     |     |          |     |                          |     |                    |     |                       |     |              |                      |            |                                   |             |                             |         |                                                               |                                                                                                      |
| 40R                               | 7725 Fibre de verre                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                            |                                                                                                                                                     |     |                         |     |                     |     |                     |     |                     |     |                      |     |                     |     |                     |     |                     |     |          |     |                          |     |                    |     |                       |     |              |                      |            |                                   |             |                             |         |                                                               |                                                                                                      |
| 50C                               | Noyau DIAB F40 1/8po                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                            |                                                                                                                                                     |     |                         |     |                     |     |                     |     |                     |     |                      |     |                     |     |                     |     |                     |     |          |     |                          |     |                    |     |                       |     |              |                      |            |                                   |             |                             |         |                                                               |                                                                                                      |
| 60R                               | 7725 Fibre de verre                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                            |                                                                                                                                                     |     |                         |     |                     |     |                     |     |                     |     |                      |     |                     |     |                     |     |                     |     |          |     |                          |     |                    |     |                       |     |              |                      |            |                                   |             |                             |         |                                                               |                                                                                                      |
| 70R                               | 7725 Fibre de verre                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                            |                                                                                                                                                     |     |                         |     |                     |     |                     |     |                     |     |                      |     |                     |     |                     |     |                     |     |          |     |                          |     |                    |     |                       |     |              |                      |            |                                   |             |                             |         |                                                               |                                                                                                      |
| 80F                               | 7725 Fibre de verre                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                            |                                                                                                                                                     |     |                         |     |                     |     |                     |     |                     |     |                      |     |                     |     |                     |     |                     |     |          |     |                          |     |                    |     |                       |     |              |                      |            |                                   |             |                             |         |                                                               |                                                                                                      |
| 10F                               | Peel Ply                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                            |                                                                                                                                                     |     |                         |     |                     |     |                     |     |                     |     |                      |     |                     |     |                     |     |                     |     |          |     |                          |     |                    |     |                       |     |              |                      |            |                                   |             |                             |         |                                                               |                                                                                                      |
| 20F                               | Release film non perforé                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                            |                                                                                                                                                     |     |                         |     |                     |     |                     |     |                     |     |                      |     |                     |     |                     |     |                     |     |          |     |                          |     |                    |     |                       |     |              |                      |            |                                   |             |                             |         |                                                               |                                                                                                      |
| 30F                               | Bleeder / Breather                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                            |                                                                                                                                                     |     |                         |     |                     |     |                     |     |                     |     |                      |     |                     |     |                     |     |                     |     |          |     |                          |     |                    |     |                       |     |              |                      |            |                                   |             |                             |         |                                                               |                                                                                                      |
| 40F                               | Conformateurs (Qte 9)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                            |                                                                                                                                                     |     |                         |     |                     |     |                     |     |                     |     |                      |     |                     |     |                     |     |                     |     |          |     |                          |     |                    |     |                       |     |              |                      |            |                                   |             |                             |         |                                                               |                                                                                                      |
| 50F                               | Bagging bleu                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                            |                                                                                                                                                     |     |                         |     |                     |     |                     |     |                     |     |                      |     |                     |     |                     |     |                     |     |          |     |                          |     |                    |     |                       |     |              |                      |            |                                   |             |                             |         |                                                               |                                                                                                      |
| Heure début laminage              | 9 h 30 min                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                            |                                                                                                                                                     |     |                         |     |                     |     |                     |     |                     |     |                      |     |                     |     |                     |     |                     |     |          |     |                          |     |                    |     |                       |     |              |                      |            |                                   |             |                             |         |                                                               |                                                                                                      |
| Heure mise sous-vide (sac scellé) | 16 h 30 min                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                            |                                                                                                                                                     |     |                         |     |                     |     |                     |     |                     |     |                      |     |                     |     |                     |     |                     |     |          |     |                          |     |                    |     |                       |     |              |                      |            |                                   |             |                             |         |                                                               |                                                                                                      |
| Intensité du vide (25 inHg)       | 25 inHg                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                            |                                                                                                                                                     |     |                         |     |                     |     |                     |     |                     |     |                      |     |                     |     |                     |     |                     |     |          |     |                          |     |                    |     |                       |     |              |                      |            |                                   |             |                             |         |                                                               |                                                                                                      |
| 120                               | LAISSER POLYMÉRISER la pièce sous vide pendant 2h                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | #19<br>#23<br>21 FEV. 2017<br>22 FEV. 2017 | N/A<br>#26<br>21 FEV. 2017                                                                                                                          |     |                         |     |                     |     |                     |     |                     |     |                      |     |                     |     |                     |     |                     |     |          |     |                          |     |                    |     |                       |     |              |                      |            |                                   |             |                             |         |                                                               |                                                                                                      |



|     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                |                                                                                                                                                                                                                                                     |
|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 130 | <p><u>DÉMOULER et IDENTIFIER la pièce</u></p> <p><input checked="" type="checkbox"/> Brancher le système d'air comprimé</p> <p><input checked="" type="checkbox"/> Écrire le numéro de pièce et la date sur un collant<br/>– # de lot (date de début) – # de série ID<br/>Ex : (AAAAMMJJ) – (DAE001-XXX)</p> <p><input checked="" type="checkbox"/> Découper une pellicule de plastique protecteur bleu et la coller sur le rebord et à l'intérieur de la partie blanche (Gel coat) (Voir Annexe 1) ✓</p> <p><input checked="" type="checkbox"/> Placer la pièce sur la table d'inspection</p> | Annexe<br>1                    | #26<br>21 FEV 2017                                                                                                                                                                                                                                  |
| 140 | <p><u>Point d'inspection (inspecteur qualité) :</u></p> <p><input checked="" type="checkbox"/> Identifier la présence de surplus de résine</p> <p><input checked="" type="checkbox"/> Identifier la présence de bulles d'air</p> <p><input checked="" type="checkbox"/> Identifier la présence de zone sèche</p> <p><input checked="" type="checkbox"/> Identifier la présence de plis dans la fibre</p>                                                                                                                                                                                       | MPS-<br>300-93-<br>31-058      | <div style="border: 1px solid black; padding: 5px; display: inline-block;">             Inspecteur<br/> <br/>             Qualité           </div><br>2017-02-23 |
| 150 | <p><u>Nettoyer le moule</u></p> <ul style="list-style-type: none"> <li>Enlever la résine durcie tout le tour du moule avec une spatule en plastique pour ne pas endommager le moule</li> <li><u>Si nécessaire</u>, nettoyer le moule avec un chiffon légèrement humecté de nettoyant à moule (PMC)<br/>NE PAS TROP APPLIQUER DE "PMC"</li> </ul>                                                                                                                                                                                                                                               | Spatule<br>en<br>plastiqu<br>e | 2017-02-23<br>AB                                                                                                                                                                                                                                    |

## Section D : USINAGE

|     |                                                                                                                                                                                                                                                                                                                                                                                                 |                                                       |                                                                                       |
|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|---------------------------------------------------------------------------------------|
| 160 | <p><u>PERÇAGE ET DÉCOUPE :</u></p> <p>INSTALLER le Gabarit de perçage et découpe</p> <p>PERÇER la pièce</p> <ul style="list-style-type: none"> <li>Perçer 4 trous avec un forêt F (Dia. .257 po) au travers des canons de perçage du Gabarit <b>GAB350</b></li> </ul> <p>DÉCOUPER la pièce</p> <ul style="list-style-type: none"> <li>Retirer le Gabarit de découpe une fois terminé</li> </ul> | GAB350<br>Annexe<br>1<br>Forêt F<br>(Dia.<br>.257 po) | #30<br>9 MAR 2017                                                                     |
| 170 | <p><u>SABLAGE :</u></p> <p>INSTALLER le Gabarit de finition et d'inspection <b>GAB355</b></p> <p>SABLER la pièce jusqu'à arriver à la dimension du Gabarit <b>GAB355</b> (voir Annexe 1)</p> <p>RETIRER le Gabarit</p> <p>ÉBAVURER les arêtes vives</p>                                                                                                                                         | GAB355<br>Annexe<br>1<br>MPS-<br>300-93-<br>31-020    |  |



|     |                                                                                                                                                                                                                                                                                                                                                                   |                               |                                                                                                       |
|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|-------------------------------------------------------------------------------------------------------|
| 180 | <b>Point d'inspection (inspecteur qualité) :</b><br><input checked="" type="checkbox"/> Plier les flanges (rebords) afin de s'assurer que le Gel coat ne craque pas (Voir Annexe 1 pour ce test)<br><input checked="" type="checkbox"/> Vérifier la conformité de la pièce (Dimensions) selon le no. de dessin et selon le MPS-300-93-31-058<br><i>Reparation</i> | Annexe 1<br>MPS-300-93-31-058 | <br><i>2070328</i> |
|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|-------------------------------------------------------------------------------------------------------|

|     |                                                                                                                     |  |                     |
|-----|---------------------------------------------------------------------------------------------------------------------|--|---------------------|
| 190 | SABLER légèrement l'extérieur de la pièce <ul style="list-style-type: none"> <li>Papier 120 à 320 grains</li> </ul> |  | #26<br>14 MAR. 2017 |
| 200 | NETTOYER les surfaces extérieures                                                                                   |  | #3<br>28 AVR. 2017  |

## Section E : FINITION/PEINTURE

|     |                                                                                                                                                                                                                                                                                                                                                                                                                         |                                     |                                                                                                          |
|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|----------------------------------------------------------------------------------------------------------|
| 210 | APPLIQUER le primer <ul style="list-style-type: none"> <li>2 couches d'environ 10 mils chacune</li> </ul>                                                                                                                                                                                                                                                                                                               | MPS-300-93-31-097                   | #3<br>28 AVR. 2017                                                                                       |
| 220 | INSTALLER les attaches mécaniques (Camlocs) (Qte 4) (voir Annexe 1) <ul style="list-style-type: none"> <li>Utiliser les pinces spécialisées (OUT951) pour insérer les Camlocs dans les trous</li> <li>Utiliser l'outil spécialisé (OUT952) pour installer les rondelles de retenues</li> </ul>                                                                                                                          | Annexe 1<br>Pince à Camloc (OUT951) | 2 Mai 2017<br><i>JM</i>                                                                                  |
| 230 | <b>Inspection finale :</b> <ul style="list-style-type: none"> <li>Validation de la finition (pinholes, surface inégale, etc...)</li> <li>Vérifier s'il y a un panneau de contrôle relié à la pièce</li> <li>Étamper le carré dans le coin inférieur droit de la première page</li> <li>Identifier la pièce finale (voir Annexe 1) pour exemple et localisation</li> <li>Poids de la pièce : <u>6.4</u> (LBS)</li> </ul> | Annexe 1<br>MPS-300-93-31-058       | <br><i>20170726</i> |

## Section F : EXPÉDITION

|     |                      |                   |                     |
|-----|----------------------|-------------------|---------------------|
| 240 | Emballer et expédier | MPS-300-93-31-084 | #18<br>26 JUL. 2016 |
|-----|----------------------|-------------------|---------------------|



**Work Order ID 156636****\*156636\***

Page 1

Friday, February 03, 2017 12:56:10 PM

Item ID: D350-604-041

Accept

**\*N900040100\***Setup Start **\*NS1\***

Revision ID:

Stop **\*NS2\***

Item Name: Rear Locker Extender

Start Date: 7/14/2017 Start Qty: 1.00

**\*1\***

Cust Item ID:

Required Date: 8/17/2017 Req'd Qty: 1.00

**\*1\***

Customer:

Reference:

Approvals: Process Plan: Date: FEB 03 2017

Tooling:

Date:

Run Start **\*NR1\***

QC: Date:

SPC (Y/N):

Date:

Stop **\*NR2\***

| Sequence ID/<br>Work Center ID | Operation<br>Description | Set Up/<br>Run Hours | Tool ID | Tool # | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp |
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|

| Draw Nbr | Revision Nbr |
|----------|--------------|
|----------|--------------|

|       |   |
|-------|---|
| D2273 | M |
|-------|---|

|              |       |
|--------------|-------|
| D350-604-041 | C U/R |
|--------------|-------|

AUG 24 2017

|              |                  |      |
|--------------|------------------|------|
| 100          | Document Control | 0.00 |
| <b>*100*</b> | DOCUMENT CONTROL |      |

DAS  
5  
9-89

AUG 28 2017

|                               |                                                                      |      |
|-------------------------------|----------------------------------------------------------------------|------|
| DC                            | Memo                                                                 | 0.00 |
| Doc.Control -USB or Paperwork | Photocopy bluefile and create labels per PPP D350-604-041<br>CHG0010 |      |

|              |            |      |
|--------------|------------|------|
| 110          | PURCHASING | 0.00 |
| <b>*110*</b> |            |      |

|            |      |      |
|------------|------|------|
| Purchasing | Memo | 0.00 |
|------------|------|------|

|            |                                                         |  |
|------------|---------------------------------------------------------|--|
| Purchasing | Issue P/O: 35199                                        |  |
|            | Description: D350-604-041 Rear locker extender.         |  |
|            | Manufacture as per dwg D2273                            |  |
|            | Supplier: FDC Composites Inc.                           |  |
|            | Certification of Conformity and process sheet required. |  |

\*\*\*EXTREME CARE MUST BE TAKEN TO PROTECT THE SURFACES OF  
THE REAR LOCKER. THE SURFACES MUST BE SMOOTH AND FREE  
FROM SURFACE DEFECTS SUCH AS SCRATCHES, NICKS, OR  
DENTS.\*\*\*

\*\*\*MUST BE WELL PACKAGE, IF NOT IT WILL BE REFUSE\*\*\*



Transport Canada Transports Canada

Department of Transport

# Supplemental Type Certificate

This approval is issued to:

Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, Ontario  
Canada K6A 1K7

**Number:** SH90-4

**Issue No.:** 4

**Approval Date:** January 31, 1990

**Issue Date:** February 17, 2012

**Responsible Office:**

Prairie and Northern

**Aircraft/Engine Type or Model:**

Eurocopter France AS 350 B, B1, B2, B3, BA, D  
Eurocopter France AS 355 E, F, F1, F2, N, NP

**Canadian Type Certificate or Equivalent:**

H-83 (AS 350 Series); H-87 (AS 355 Series)

**Description of Type Design Change:**

Installation of Rear-Locker Extender

**Installation/Operating Data,  
Required Equipment and Limitations:**

Installation of Rear-Locker Extender must be in accordance with Transport Canada Civil Aviation (TCCA) approved Dart Aerospace Ltd. Installation Drawing D350-604, revision C, dated December 6, 2011 or later TCCA approved revision.

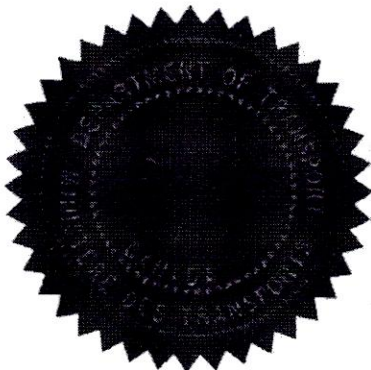
Operation of the Rear-Locker Extender must be in accordance with TCCA approved Dart Aerospace Ltd. Flight Manual Supplement FMS-D350-604, revision B, dated November 15, 2011, or later TCCA approved revision.

Maintenance of the Rear-Locker Extender must be in accordance with TCCA accepted Dart Aerospace Ltd. Instructions for Continued Airworthiness ICA-D350-604, revision 0, dated November 15, 2011, or later TCCA accepted revision.

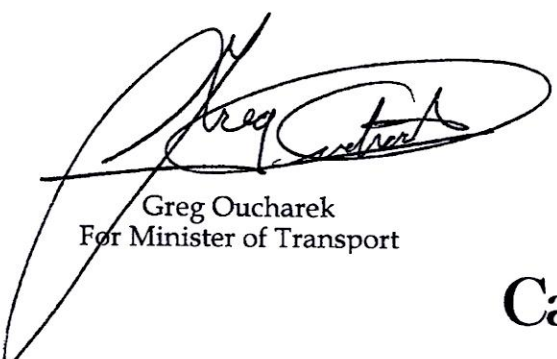
Definition of Type Design Change: TCCA approved Dart Aerospace Ltd. Master Document List MDL-D350-604, revision A, dated February 2, 2012, or later TCCA approved revision.

Basis of Certification for affected areas: 14 CFR, Part 27 at amendment 27-21.

— End —



**Conditions:** This approval is only applicable to the type/model of aeronautical product specified therein. Prior to incorporating this modification, the installer shall establish that the interrelationship between this change and any other modification(s) incorporated **will not** adversely affect the airworthiness of the modified product.

  
Greg Oucharek  
For Minister of Transport

Canada